EXPLORING AN INVISIBLE MEDIUM: TEACHER LANGUAGE AWARENESS AMONG PRESERVICE K12 EDUCATORS OF ENGLISH LANGUAGE LEARNERS

by

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ABSTRACT

This study investigates the construct of Teacher Language Awareness (TLA) in a group of preservice mainstream K-12 teachers who are developing skills to work with English Language Learners (ELLs) in United States (US) public school contexts. Specifically, the study seeks to explore how preservice teachers' participation in directed university coursework about second language (L2) instruction affects the development of TLA. Participants in this quasi-experimental study (N=116) derive from two groups: one group enrolled in a course that adopted an incidental approach to the development of TLA, and the other enrolled in a course that adopted an deliberate approach. The study established a descriptive baseline for the participants' TLA via pretest tasks in the Analyst and Teacher Domains.

Participants' degree of TLA before directed coursework was low, based on their pretest scores on Analyst and Teacher Domain tasks, as well as analysis of written reflections. Yet, participants from the deliberate group who received treatment in the form of an explicit approach to the development of TLA exhibited a significant improvement in the Analyst Domain over those enrolled in the incidental TLA course. Neither group demonstrated significant improvement in the Teacher Domain. Focus group interviews were conducted with participants from both groups to determine how their attitudes, perceptions, and experiences might have influenced their TLA

development during the semester. The results suggest that deliberate approaches to developing knowledge about language (KAL) are necessary for K-12 mainstream teachers. Results also suggest that teacher educators may need to adopt an explicit approach to developing TLA in L2 methods classes in order to help PSTs integrate TLA as a critical component of their pedagogical content knowledge.

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CHAPTER 1

INTRODUCTION

Over 1 billion people worldwide are learning English, with 375 million of those in countries where English is spoken as the majority language. Specifically in the United States, the number of adults who speak a language other than English is estimated at 47 million people, or 18% of the total population (Graddol, 2006; U.S. Census Bureau, 2003). Naturally following this changing language demographic among adults is the rapidly increasing number of children in U.S. public schools who are considered English language learners (ELLs). ELLs can be described as learners whose English proficiency has not yet developed to a point where they can fully profit from traditional content-area instruction in English (García, Jensen & Scribner, 2009).

Current statistics from the National Clearinghouse for English Language Acquisition (NCELA) indicate that one in six school-age children in the United States speaks a primary home language other than English [National Center for Education Statistics (NCES), 2005], while predictions forecast for 2025 estimate that one in every four students will initially be classified as an ELL in U.S. public schools (Diáz-Rico & Weed, 2010, p. 3). As a result of this changing demographic in K12 schools, much public attention is centered on the academic performance of ELLs in Kindergarten through Grade 12, with mounting pressures on educators to improve ELL scores on high-stakes

standardized assessments (Short, Boynson & Coltrane, 2003). Current findings indicate that ELLs are not meeting with much success in the content areas (i.e., math, language arts, science, and social studies) when compared to their native English-speaking peers. For example, 70% of eighth grade ELL students scored below basic proficiency in reading on the National Assessment of Educational Progress (NAEP), compared to only 26% of their native English-speaking peers (National Center for Educational Statistics [NCES], 2007). In addition, ELLs graduate from high school at far lower rates than do their native English-speaking peers; 31% of ELLs leave school before graduating, while only 10% of native speakers of English drop out (Short & Fitzsimmons, 2007).

The reasons for these huge discrepancies in academic achievement on standardized assessments may reside with specific factors related to academic literacy development among ELLs. These factors include interrupted formal schooling, which results in learners who may not completely understand the American school system or who may have gaps in the content-area knowledge required by the same system. In addition, some ELLs may have preemergent or emergent literacy skills in their first language (L1), which can affect the development of academic literacy skills in English (their second language, or L2). Cultural differences also play a role in difficulties with academic literacy development. For example, ELLs require additional time to acclimate to school routines and expectations in the United States (Short & Fitzsimmons, 2007). Even for elementary- level ELLs who were born in the U.S. and began their formal schooling in U.S. public schools, there are still differences between their home and school cultures. These cultural differences are apparent in instructional materials, classroom design, and teacher perspectives, and further compound the difficulty of developing L2 literacy

among ELLs.

The U.S. public school system has attempted to respond to the needs of culturally and linguistically diverse students but, ultimately, has had trouble keeping pace with the rapid growth of the ELL population and their academic language needs. Traditionally, the responsibility for the education of ELLs was thought to reside with school or district ESL specialists (i.e., teachers with some training in L2 pedagogy and methods, usually in the form of a state ESL endorsement, who work exclusively with ELLs) rather than with mainstream teachers. For purposes of this study, ESL specialists as described above will be categorized as L2 educators due to their training in L2 pedagogy and methods. In contrast, the term "mainstream teachers" will refer to educators who, in elementary school, are assigned to students at one grade level and teach all of the principal content areas (e.g., math, science, social studies, language arts, physical education, or music) or to educators in secondary schools who focus on one content-area specialty with students rotating among teachers to receive instruction in each content area.

With this distinction in mind, most schools claim only a handful of ESL specialists (often only one) but now have ELL populations that account for 40-80% of the students in the entire school. As such, accountability for educating ELLs should be diffused across all school faculty members, rather than reside with a small number of ESL specialists (García, Jensen & Scribner, 2009). Although mainstream teachers are now more responsible for educating large numbers of ELLs, they may lack the pedagogical skills necessary to do so effectively. As of 1997, only 2.5 % of all teachers who worked with the ELL population held a degree in ESL or bilingual education (Herrera & Murry, 2011).

Different instructional models have been tried for educating ELLs; yet, the instructional model chosen may not account for the cultural and linguistic issues affecting teachers' pedagogical ability to implement a model effectively. (For a discussion of these instructional models for ELLs, see Lindahl & Christison, 2011.) Culturally, most U.S. public school mainstream teachers are middle-class, female, and monolingual European-Americans while many of their students live at or below the poverty line, speak home languages other than English, and belong to ethnic minority groups (Smolcic, 2010). Because of these differences, teachers often encounter difficulty in both implementing effective pedagogical practices and identifying with the multicultural experiences of their language learners (Villegas & Lucas, 2002) and, therefore, have difficulty in willingly accepting responsibility for their education.

Language issues further compound the educational challenges that schools face in educating ELLs. Many mainstream teachers, particularly in the secondary school context, define their roles as content-area experts, not as language teachers (Mitchell & Hooper, 1991). The refusal of mainstream teachers to see the dual nature of their roles (i.e., as teachers of language and content) remains problematic for ELLs who are usually only served in ESL programs for 1 to 3 years but continue developing academic language skills for anywhere from 5 to 10 years (Collier & Thomas, 2002). Also prevalent in general education literature is the view of culturally and linguistically diverse learners as liabilities, rather than classroom assets (Herrera & Murry, 2011). Because ELLs have difficulty understanding English, they are often seen as being likely to fail, to not benefit from instruction, to experience failure because of interrupted formal schooling, or to perform poorly on standardized tests, thereby lowering a school's overall standardized

test score averages. Even when mainstream teachers willingly assume an integrated role of content-and-language teacher, many of them have not been educated in L2 methodology and language awareness and are, thus, underqualified to fulfill the role of language teacher (Cushner, McClelland, & Safford, 2006; Escamilla, 2009; Herrera & Murry, 2011; Short & Fitzsimmons, 2007). Being underqualified often results in a lack of clarity on what being a language teacher actually entails and results in negative ELL student outcomes, such as lack of class participation, fewer meaningful peer and teacher interactions, fewer opportunities for language development, and low scores on measures of academic achievement (Harper & de Jong, 2009).

Historically, public school systems have not made investing in professional development to improve teacher preparation for ELLs a priority (Wong-Fillmore & Snow, 2002). Indeed, of all the public school teachers in the United States, only 12.5% of those teachers who had ELLs in their classrooms have had at least 8 or more hours of professional development on ELL topics (NCES, 2002 as quoted in Herrera & Murry, 2011). Prominent discourse surrounding the field of L2 teacher education centers on a growing concern that the expertise and professionalism of L2 teachers are being devalued by the U.S. public school system's ad hoc decision-making relative to policy and planning for ELLs. The decision-making is often focused on how to quickly train mainstream teachers with toolbox-type strategies and how to combine these strategies with watered down theory derived from second language acquisition (SLA) research (Harper & de Jong, 2009).

Coupled with the demand to train teachers as quickly as possible in ELL education is the misconception that L2 teaching is just good teaching (Harper & de Jong,

2004). Known as the JGT phenomenon, this misconception has also contributed to the devaluation of English language teacher expertise. These trends (i.e., the failure of public education to invest in appropriate professional development for teachers of ELLs, the devaluing of L2 teacher expertise, the quick fix approach to the professional development of teachers, and misconceptions about the skills needed) are not unique to the United States; other English language countries, such as Australia, Canada, and the United Kingdom have all experienced this to some degree (Harper & de Jong, 2009; Mohan, Leung, & Davison, 2001).

The devaluation of the L2 teaching profession seems to continue despite research that supports the fact that the requisite L2 pedagogical knowledge base for teaching language learners is distinct from that of the general education knowledge base. Even teachers who are language arts teachers focus on content in English, such as literature, the writing process, and some prescriptive grammar rules, rather than on language as a system and on understanding language from the perspective of a second language learner. This misunderstanding about the role of language arts teachers confounds the notion of what language instruction for ELLs actually entails (Andrews, 2001; Elder, 2001) because many schools assume that language arts teachers are prepared to work with ELLs. In addition, Brumfit, Mitchell, and Hooper concluded that significant differences between secondary language arts teachers and L2 teachers' beliefs and practices were prevalent ((Brumfit, 1997; Brumfit, Mitchell & Hooper, 1996; Mitchell & Hooper, 1992). Mullock (2006) also found that the pedagogical content knowledge of ESL teachers differed from that of mainstream teachers in general. Part of the ESL pedagogical knowledge base described in Mullock's findings includes greater familiarity with the

structures of English and their pedagogical applications for language learners, higher degrees of metalinguistic awareness, the ability to integrate content and language goals, and a wider variety of scaffolding strategies.

As these studies show, a fundamental difference between mainstream teachers and L2 teachers is their ability to treat a rather nebulous concept: language itself. Diaz-Rico and Weed (2010, p. 113) classified language an "invisible medium" because mainstream teachers typically have never before had to consider the English language in terms of pedagogy. The deliberate teaching of English is problematic for many mainstream teachers who are limited to conceptualizing language development within the content areas in the simplistic form of vocabulary (Short & Echevarria, 2004). Furthermore, as mentioned above, the majority of mainstream teachers are monolingual speakers of English, and, thus, they have never had the experience of learning another language deliberately. Teachers who have had experiences in learning a second or foreign language have different perspectives on language and language learning than do those teachers who have only known the implicit learning of a first or mother tongue language (Larsen-Freeman & Long, 1991; Lightbown & Spada, 2006).

Despite the challenges inherent in educating ELLs, a paradigm shift is occurring with regard to the role of the mainstream teacher as a professional who must now occupy the overlapping roles of content-area expert and language teacher. With language expertise as a main variable in the knowledge base among teachers who are working with ELLs, it would serve the field well to more closely examine teacher language expertise relative to how such expertise affects both pedagogy and teacher cognition. The technical term for this construct in the literature is Teacher Language Awareness, (TLA), and it

entails multiple roles for teachers, including English language user (the User Domain), purveyor of content knowledge about English (the Analyst Domain), and empathizer with what ELLs experience as language learners (the Teacher Domain; Andrews, 2001; Wright, 2002). For example, the User role encompasses an individual's language proficiency, the "analyst" domain includes an individual's knowledge about a language's system and characteristics, and the Teacher Domain entails an individual's ability to recognize elements of language that would be difficult for L2 learners. The examination of these TLA roles relative to the pedagogical knowledge base of preservice mainstream educators serves as the purpose of the current study.

More specifically, the study aimed to achieve three goals. First, it endeavored to establish a baseline for TLA among preservice mainstream teachers enrolled in two courses in a U.S. university-level teacher education program. Mainstream public school teachers will almost assuredly have ELLs in their classrooms; still, little if any TLA research has been conducted with these educators as participants. Additional information on TLA in this context is needed to support other research related to developing best teaching practices and appropriate curriculum for ELLs. Second, the study was designed to determine how participation in directed coursework in L2 pedagogy affected the development of TLA in preservice mainstream teachers (PSTs). This was accomplished by comparing the development of TLA among PSTs who were enrolled in two university-level, semester long courses designed to increase language awareness and instruct students in basic L2 methodology. One of the courses adopted an incidental approach to the development of TLA, i.e., instruction was provided to preservice mainstream teachers on how to provide L2 instruction, but specific language systems and

characteristics were not overtly addressed. The other course adopted a more deliberate approach, i.e., it provided preservice mainstream teachers with explicit information on the linguistic system of English and the application of this information to teaching ELLs. Third, the study sought to examine the attitudes, experiences, and perceptions, that underpinned mainstream PSTs' TLA development. Teachers' beliefs and background experiences may influence how they provide instruction (Johnson, 1994; Pajares, 1992); consequently, it is important to examine mainstream teachers' life experiences and perceptions as they relate to their degree of TLA.

Congruent with the study's goals are three research questions that relate to the changing roles and pedagogical knowledge bases of mainstream teachers and guide the development of the proposed research:

1. What is the baseline of TLA held by preservice mainstream teachers enrolled in university-level courses on L2 education in the United States?
2. How does the degree of TLA change over time between preservice teachers who have completed an L2 methods course with incidental instruction about TLA, and those who have completed an L2 methods course with deliberate instruction about TLA?
3. What are the attitudes, perceptions, and experiences that underpin the degree of TLA held by preservice K-12 teachers both before and after incidental and deliberate approaches to TLA development?

Much of the research on TLA has been conducted on teachers in EFL contexts, rather than in contexts where teachers are native speakers of English and are simultaneously instructing heterogeneous groups of both ELLs and native speakers of

English in content areas. Before moving forward with curricula designed to educate teachers in effective methodology for language learners, L2 teacher educators require more information about how much and what type of TLA preservice mainstream teachers possess. A relationship may exist between PSTs' degree of TLA and their efficacy in implementing L2 methodology. In addition, more information is needed on how to develop TLA and the effect of formal instruction on the development of teaching skills.

The robustness of K-12 teacher education is at stake if preservice teacher education does not adequately respond to the needs of mainstream teachers as they learn to work with ELLs. The already high levels of attrition in the education profession—around 27% per year according to Keigher (2010)—are evidence of the feelings of helplessness and frustration among mainstream teachers. In addition, the punitive measures taken by some schools and districts in response to low standardized test scores could also negatively affect both current and future teachers. The trend of ELL underachievement resulting from teacher underqualification and a lack of what August and Shanahan (2006) deem an "incomplete answer to what constitutes high quality instruction for language minority students" need not continue if we can develop a better understanding of TLA and create effective teacher education programs that are based on that understanding.

The implications of the proposed research are profound. The underachievement of linguistically diverse students in public schools, many of whom are U.S. citizens, is also an issue that is relevant to society as a whole. ELL students represent the fastest growing student demographic; yet, adolescent ELLs in particular are the group most at risk for failure (Short & Fitzsimmons, 2007). As such, what will transpire in American society as

these adolescents become adults and enter the work force? If the current trend continues in the next decade, a major portion of the youth entering the work force could be ill prepared for the increasing demands of literacy and technology. The U.S. workforce will lack a skill base essential to remaining competitive in the global workplace and maintaining a high quality of life.

The current study represents an important step in contributing to our understanding of the pedagogical and language knowledge base of preservice mainstream teachers who are native speakers of English in public schools. As such, the study does not include L2 speakers of English as participants. The principal reason for excluding L2 speakers of English is because L2 speakers have had very different language learning experiences, which could result in potentially heightened language awareness. This language awareness of English in particular could confound some of the variables controlled for in the present study. The current research is situated within a specific context, in this case, among preservice mainstream teachers in two semester-long courses at a university in the United States. Also, the study itself does not serve to inform best teaching practices, nor is it linked directly to positive ELL student outcomes.

Even though one of Borg's (2006) implications is that a potential direction of research on teacher cognition (and, therefore, TLA) would be to attempt to link teacher cognition and student learning, Johnson (2006) offers a critique of this. She indicates that the relationship may be one of influence, rather than causality (2006; 196). This explanation is most likely the case; wherein, further research on TLA in United States' public school contexts can further illuminate the knowledge base of the mainstream teacher, and information about that knowledge base may then be applied in teacher

education contexts. A potential benefit is that this additional awareness will positively influence the paradigm shift of mainstream teachers as they develop a knowledge base that more closely parallels that which has been traditionally associated with an ESL specialist. In extending the study of TLA beyond the boundaries of its influence on English as a Foreign Language (EFL) or ESL educators to include its influence on mainstream educators as well, the study may garner more support for the reconceptualization of the role that language plays for all educators who interact with ELLs.

In this introductory chapter, I have outlined the need for continued inquiry into the ways that cultural and linguistic differences among mainstream teachers and students instigate a paradigm shift as to the skills needed for U.S. mainstream teachers to be effective educators of diverse students. Many of these skills are included in TLA, an intersection of a teacher's ability to use language, convey knowledge about language, and empathize with language learners' experiences with English. An extended definition of TLA is proffered in Chapter 2, followed by a discussion of TLA's theoretical underpinnings from second language acquisition (SLA) and language teacher cognition research. Chapter 3 focuses on the design of the current study that proposes both quantitative and qualitative data collection methods. Chapter 4 presents the results of these methods, and Chapter 5 discusses them in depth. Finally, Chapter 6 outlines the conclusions that can be garnered from this examination of how TLA may play a very real part in the continuing evolution of teacher cognition.

CHAPTER 2

TEACHER LANGUAGE AWARENESS

Theoretical Bases of TLA

The following chapter explicates the theoretical underpinnings of Teacher Language Awareness (TLA), a multifaceted construct that draws from both SLA research findings and research on L2 pedagogy. I make the argument that TLA is one of the primary features of a pedagogical knowledge base that should be developed in all educators who will work with ELLs in U.S. K12 contexts, not only those who identify as English as a Second Language (ESL) specialists. The bulk of the research on TLA has been conducted specifically on L2 educators (i.e., teachers of English as a second or foreign language), rather than mainstream educators. Even though the traditional standard is shifting so that mainstream teachers are also teaching language, very recent research on TLA does not reflect this evolution and still focuses exclusively on the L2 educator. Still, parallels can be drawn between findings addressing the L2 educator's need to develop TLA, as described below, and the mainstream educator's need to develop TLA, as now both types of educators in the public school context work to develop academic language with ELLs.

What characteristics, then, do L2 teachers who have extensively developed TLA exhibit? According to Andrews and McNeil (2005), L2 teachers with high degrees of TLA typically demonstrate the following behaviors with regard to their attitudes:

- a willingness to engage with language;
- self-awareness, particularly with regard to their awareness of the limitations of their own subject matter knowledge but without interfering with the willingness to engage mentioned above;
- self-awareness linked to a quest for self-improvement; and
- a willingness to engage in reflection about the content of learning (i.e., reflection *on* action and reflection *in* action.

With regard to their actual teaching practices, L2 teachers with developed TLA typically:

- focus on linguistic forms at appropriate points in their lessons;
- provide input enhancement that promotes the transition of noticing to intake;
- demonstrate an awareness of learners' potential difficulties; and
- display an ability to provide comprehensible input.

In order to develop these characteristics, three types of knowledge are cited throughout various conceptualizations of TLA. These include: 1) knowledge of language, or a certain level of language proficiency; 2) knowledge about language, or a grasp of language systems and structures, which are sometimes referred to as subject knowledge for language arts teachers; and 3) some form of pedagogical content knowledge that includes both methods and strategies for language teaching, as well as some level of

empathy toward the L2 learning experience(s) of their students (Andrews, 2003; Coniam & Falvey, 2002; Wright, 2002).

As such, TLA may be considered in terms of three distinct (but sometimes overlapping) domains: the User Domain, the Analyst Domain, and the Teacher Domain (Wright, 2002; Wright & Bolitho, 1993). The three domains, corroborated by findings from research in the field, are explicated below.

The User Domain

The first domain addresses the L2 teacher as a user of English, which requires knowledge *of* the English language, or language proficiency. Although native speakers do not often have issues as users of the language, they may still need to develop their own language abilities in pedagogical contexts or with standard academic English (Andrews, 2001; 2003). For example, native speakers may need to learn specific vocabulary relative to content areas, or if they are speakers of a nonstandard variety of English, they may need to model a standard variety for students in the classroom. As for non-native speakers of English, the User domain may be the aspect of TLA with which they struggle most. For instance, Lavender (2002) found that, for non-native English speaking teachers, language improvement [in English] was ranked as most important to them during their teacher education experience. An example of where the User domain may be developed among preservice L2 teachers, both native speaking and non-native speaking, can be seen in L2 teacher education and TESOL programs that include courses on the pedagogical structures of English (Andrews, 2007).

The User domain includes more than simple language proficiency. This domain

also encompasses the ability to participate in the language within the social and pragmatic norms of that language, in addition to being able to employ sentence structure and lexicon (Cullen, 1994; 2001). Wright argues that the User domain should also entail basic curiosity about language use, awareness of varieties of language use, sensitivity toward linguistic imperialism of majority languages, as well as repair and reformulation strategies (2002). These characteristics of the User domain may pose extended difficulties for monolingual speakers of a language (such as the mainstream teachers detailed in the proposed study) because, as monolinguals, they have never learned a second or foreign language, and may also have had very little exposure to different varieties of their own native language. They may also be unaware of the power influences that a majority language can have over minority language groups and remain naïve about linguistic imperialism unless their own life experiences have provided them an opportunity to develop this insight.

The "Analyst" Domain

Language proficiency is not the only critical piece of TLA; knowledge *about* language is also necessary for both L2 and mainstream teachers. They need to develop expertise in order to understand their roles as educators of L2 learners (Wright, 2002). It is a common misconception that being a native speaker of a language inherently qualifies an individual to be a teacher of that language; research demonstrates that this is not necessarily the case. In fact, it is not uncommon for native English-speaking preservice L2 teachers to enter L2 education or TESOL programs with no or very little knowledge about their own language (Andrews, 1997; Bolitho, 1995). Consistent with this notion are

Andrews's (1999) findings, wherein nonnative speaking L2 teachers significantly outperformed native speaking L2 teachers on tests of grammar knowledge and grammatical terminology.

As such, knowledge about language, or the "analyst" domain, has largely been the focus of grammar teaching research in the past. This domain, for L2 teachers, is sometimes referred to as knowledge of subject matter, which is often translated as knowledge of language systems (Thornbury, 1997). It encompasses knowledge about the forms and functions of language systems, with specific focus on syntax, morphology, phonology, pragmatics, and semantics. Teaching about language structure is often widely associated with this domain; a form-focused approach to L2 teaching is usually incorporated within this domain, and this approach requires very high levels of knowledge about language in order for it to be effectively implemented (Andrews, 2003).

Just as the User Domain entails much more than simply an ability to speak English, the Analyst Domain entails more than knowing about grammar. While this focus on knowledge about language may seem counterintuitive to communicative language teaching approaches that reduce the role of deliberate grammar teaching, Andrews (2007) argues that knowledge about language is necessary to effectively implement communicative methods. Wright and Bolitho (1993) summarize the point in their statement, "the more aware a teacher is of language and how it works, the better [students will learn.]"

Additional goals of developing the Analyst domain are to deepen L2 teachers' understanding of the English language, as well as help them develop expertise as language educators (Wright, 2002). Individuals with a well-developed Analyst Domain

possess metalanguage, or the language used to talk about and analyze language itself (Berry, 2005), such as grammatical categories. The ultimate goal in developing the analyst domain is for L2 teachers to be conscious analysts of their own as well as others' linguistic processes (Brumfit, 1997).

For L2 teachers to be mindful analysts of language, metacognitive processes are essential, such as the ability to monitor and evaluate one's own learning, the ability to select appropriate strategies to accomplish a cognitive task, the ability to detect distracting stimuli and presevere on a task, and the ability to self-regulate using executive skills (Metcalfe & Shimamura, 1994). Derived from metacognition, or thinking about the processes underlying cognitive behaviors, metalinguistic awareness may be defined as the basic understanding that language is a formal system which carries meaning—either meaning carried by words or the connection between grammatical form and meaning (Doherty & Perner, 1998; Siegel, 2003). TLA is ultimately metacognitive in nature because it requires teachers to be aware and to reflect upon their own thinking and language use (i.e., they must reflect upon their roles as both user and analyst if they are to act as an effective L2 teacher; Andrews, 2003). Language proficiency in the User Domain does not equate to automatic metalinguistic awareness; it must be developed (Alderson, Clapham, & Steel, 1997). Such an awareness of the underlying linguistic nature of language use is what enables a language learner to step back from the comprehension and production of language and consider the actual linguistic forms and structures, as well as their associated meanings (Malkoff & Hakuta, 1991, p. 147). Metalinguistic awareness may also be divided into subgroups for specific study, as seen in Bialystok (2001), with the division of metalinguistic awareness into word awareness,

syntactic awareness, and phonological awareness.

Common elicitation techniques for metalinguistic awareness include grammaticality judgment tests; ratings and rankings; preference or paired comparisons; rule expression and definitions; editing and correcting; magnitude scaling; and estimation (Chaudron, 2003). A metalinguistic task, then, is one that requires an individual to attend to and reflect upon the structural features or the grammar of language itself. Thus, an aspect of metalinguistic awareness is the ability to successfully approach and solve certain types of language problems. The identification of said problems would require metalinguistic awareness while the skill involved would be the ability to recognize the nature of the language problem and meet its demands (Bialystok & Ryan, 1985). The problem-solving nature of metalinguistic analysis is operationalized in Moore's (2006) explanation of metalinguistic awareness, wherein, she portrays it as a potential bridge between languages. The bridge characterization derives from the notion that a language learner with metalinguistic awareness can examine both the common and contrastive properties of languages. From those observations, learners can then "construct their own systematic and partially hypothetical theories about language and language functions" (Moore, 2006, p. 126).

While metalinguistic awareness has been extensively studied in L2 learners, it has been less often examined in their teachers. Teachers who have higher degrees of metalinguistic awareness may be more likely to appreciate the linguistic benefits of being plurilingual. Moore (2006, p. 136), concluded,

> If our research contributes to demonstrate the wide range of metalinguistic abilities shown by young plurilingual children, their school teachers remain often unaware of children's knowledge and abilities in different

> languages and fail to see them as potential resources for learning. If children's perceptions of language distance clearly influence the strategies they test, these perceptions not only depend on their potential as plurilingual speakers but also on the school treatment of such abilities.

It seems logical to assume that if a teacher lacks metalinguistic awareness, then not only is it possible that they will be much less likely to help develop this awareness in their students, but they could also mistake linguistic assets such as bilingualism for hindrances to learning. Consequently, more research on the metalinguistic awareness of teachers--both L2 and mainstream--is needed. (See the "teacher domain" of TLA as described below.)

With specific regard to mainstream teachers' knowledge about language, Wong-Fillmore and Snow (2002) assert that mainstream teachers need to know about certain components of language, including: basic units of language, how forms relate to each other, how the lexicon is acquired and structured, how vernacular dialects differ from standard English, components of academic English, processes of L2 acquisition, the external factors affecting L2 acquisition, spelling systems, early reading skills, structures of narrative and expository writing, and evaluating writing (2002). They also claim that the study of educational linguistics [i.e., the training of teachers and administrators in those aspects of language especially relevant to schools, or more generally, an area of study that integrates the research tools of linguistics and other related disciplines of the social sciences in order to investigate issues related to language and education (Spolsky & Hult, 2008) is essential—the "bare minimum for preparing teachers for today's schools" (Wong-Fillmore & Snow, 2002, p. 74).

Even though courses in professional preparation programs teach knowledge about language, very few studies have been conducted within the context of those courses or on their eventual outcomes for future teachers (Bartels, 2002). In the same vein as Wong-Fillmore and Snow's assertions as to what teachers should know about language, Harper and De Jong sought to examine whether teachers could identify what good or effective teachers of ELLs should know or be able to do (2009). They polled 128 preservice elementary teachers who were seeking a general teaching certification and an ESL endorsement using a written survey. Via the survey, PSTs were asked to describe what it is that good teachers of ELLs need to know and be able to do. They were also asked to characterize differences between homogeneous classrooms (i.e., a classroom of all native speakers of English) and heterogeneous classrooms (i.e., a classroom of both ELLs and native speakers of English). Findings indicated that overall, the PSTs were more concerned with general pedagogical concepts and skills rather than language-specific and culture-specific knowledge and skills, corroborating Wong-Fillmore and Snow's (2002) assertion that many mainstream teachers need additional information about the importance of language in today's classrooms.

Harper and De Jong (2009) replicated the preceding study with 19 secondary language arts teachers of ELLs, who, by way of another written survey, were asked to describe what "good" language arts teachers of ELLs needed to know and be able to do. They arrived at very similar results as the study on elementary teacher candidates; there was a slightly greater emphasis on language instruction than in the elementary PST's responses, but still missing were the notions of making accommodations to curriculum and providing deliberate language teaching.

Mainstream educators are not the only ones who may face challenges in the Analyst Domain. Borg (2006) reviewed six studies relative to investigating teachers' knowledge about language systems, specifically in terms of their knowledge of grammatical forms and their functions. In this review, Borg also refers to grammar knowledge as teachers' declarative knowledge about language. Of the six studies, five took place in the United Kingdom in ESL contexts, and one took place in the EFL context in Hong Kong. Methods employed in all six studies included tests of knowledge of English grammar rules and terms, and one study also included teacher educators' ratings of the grammar awareness of their L2 teacher trainees. Findings from these studies indicated that overall, grammar knowledge was fairly low among all participants, and that misconceptions about language and a lack of metalanguage to use in linguistic analysis were prevalent as well. Ultimately, all studies concluded that there was a need for language teacher education programs to develop declarative knowledge about language among preservice L2 teachers.

Declarative knowledge about language factors heavily into the Analyst Domain, as it constitutes consciousness raising and noticing of language structures and systematic relationships. Procedural knowledge, or the knowledge of how to use English in general, may be more easily attributed to the User Domain of a teacher's language proficiency. In past conceptualizations of TLA, only the Analyst Domain was acknowledged, oversimplified as looking at TLA as only declarative grammar knowledge that a teacher simply relates to their general knowledge of pedagogy (Andrews, 1997, p. 149). However, when looking at TLA within the framework of the User, Analyst, and Teacher Domains, both procedural and declarative knowledge are not exclusive to one domain

over another. For example, teachers not only need procedural knowledge of English (i.e., the know-how to use English), they also need to know how to use it pedagogically to convey information as part of the teacher domain, which would be an example of procedural knowledge in both the User and the Teacher Domain. Also, L2 teachers need to reflect upon the language that is used during the teaching process, which would require declarative knowledge of language, and would be a combination of the Analyst and Teacher Domains (Andrews, 2001*)*. Andrews also posits that, based on his research findings, declarative knowledge about language alone does not affect teacher performance; it is sometimes teachers' metalinguistic awareness relative to their teaching practice, or what he calls "metalinguistic awareness in operation" that affects what they do in a language classroom (2007, p. 160). Thus, both declarative and procedural dimensions must be accounted for in examining language awareness. This combined view of declarative and procedural knowledge is intrinsically different from one that maintains their assignation to one domain of TLA or the other.

The Analyst Domain also brings issues about the distinction between implicit and explicit knowledge about language, which Andrews (2007) notes is different than the distinction between implicit and explicit learning—a distinction that happens to be at the heart of a number of controversies existing in SLA research. The controversy resides in disagreement over the role of the learner's conscious mental processes in L2 acquisition. The noninterface position, such as that adopted by Krashen (1981), supports the notion that learning (resulting in explicit knowledge) and acquisition (resulting in implicit knowledge) remain two distinct processes and that learning, which occurs via conscious mental processes as a result of formal instruction, will never become acquisition, which

occurs via subconscious mental processes that are the result of meaningful interactions in a target language. The strong interface position supports the idea that language learning done consciously in a formal setting will eventually be acquired, i.e., will eventually allow the learner to use what is learned in informal settings for authentic communicative purposes. The weak interface position reconciles learning and acquisition by asserting that the declarative knowledge obtained via formal language instruction may never transform into implicit procedural knowledge, but it may facilitate noticing—a process wherein learners begin to notice differences between features of the target language input and their own interlanguage (Schmidt, 1994).

Still, more recent research has provided additional support for the declarative knowledge developed by the explicit teaching of grammar. Ellis (2006) cites several studies that provide evidence for the notion that explicit grammar instruction impacts both acquired knowledge and learned knowledge, one of which is Norris and Ortega's (2000) meta-analysis of 49 different studies. The two findings most relevant to the proposed study conclude that, 1) when taught using focused L2 instruction, L2 learners made large gains in producing a target language form, and 2) that explicit types of instruction are more effective than implicit types. More specifically, when experimental groups were exposed to a form-focused intervention, they made larger gains in producing the form than the control groups, even when the control groups were exposed to material in which the target form was embedded. Norris and Ortega (2000) also found that explicit instruction on grammar, whether it was inductive or deductive in nature, led to greater effect sizes than implicit grammar instruction, and that it did not matter greatly whether the instruction was focused on forms or focused on form integrated in meaning.

Some methodological caveats to these analyses and others supporting explicit instruction over implicit instruction are offered by Norris and Ortega (2000). These include the fact that deliberate, explicit interventions used in experimental and quasi-experimental designs are often intensive, shorter interventions, and incidental, implicit treatments may require more time to affect results—longer than the experiments actually lasted. The fact that the research environments in the included studies varied widely must also be considered, as must the fact that focus on form and focus on form integrated in meaning were two constructs that the authors found ill-defined. Ellis (2006) also mentions that the nature of the responses—highly structured, constructed response items— by participants in many of the studies, might favor explicit grammar teaching over a free response structure, which might favor communicative tasks. Ellis also cautions that, because learners do not always acquire what they have been taught, the measurement of whether grammar instruction has been effective should account for whether forms have been integrated into the developing interlanguage of the L2 learner. Still, Ellis asserts that benefits of developing explicit knowledge definitively exist, as it is used in the process of creating utterances, monitoring them, and potentially assisting in the L2 development process by facilitating the development of incidental knowledge (a nod to the interface positions detailed above).

The distinction between explicit and implicit knowledge is relevant to TLA for two reasons. First, James (1992) states that the consciousness-raising caused by L2 learning allows L2 learners to notice errors and rectify them, while the consciousness-raising about language that is called for in the Analyst Domain of TLA results in the ability of teachers to reflect metacognitively about language over which the teacher

already has a "high degree of skilled control and inexplicit intuitions, i.e., it is incidental knowledge that has become explicit" (p. 18). The other reason the implicit-explicit learning distinction is important to TLA is that L2 teachers may themselves choose pedagogical strategies and activities based upon their own view of learning and acquisition. However, Andrews's ultimate conclusion is that both types of knowledge (explicit/implicit and declarative/procedural) are of value to developing TLA, whether or not L2 teachers believe that the L2 students should develop both declarative and procedural knowledge, or in what manner they should be developed (2007, p. 16). For purposes of the proposed research, Andrews's stance will be adopted, namely that explicit/implicit and declarative/procedural knowledge both are important for the development of TLA.

The "Teacher" Domain

While the User Domain of TLA addresses a teacher's ability to use the language, and the "analyst" domain addresses a teacher's ability to be a conscious analyst of the language, the "teacher" domain addresses a teacher's ability to provide instruction both in and about the language, which makes it perhaps the most complex of the three domains. Consequently, the Teacher Domain of TLA comprises a principle part of L2 teacher education. It is discussed below in terms of general *language teacher cognition,* or what Borg (2003) defines as "what teachers know, believe, and think" in terms of their past school experience, the professional coursework they completed, contextual factors affecting their practice, and actual classroom practices. More specifically, under the umbrella term of language teacher cognition is *pedagogical content knowledge*, which is

the knowledge that enables a teacher to adapt specific content information and convey it through pedagogical means that align with both students' needs and abilities (Shulman, 1987). Pedagogical content knowledge differs from general pedagogical knowledge, which can be defined as the knowledge of pedagogical principles and techniques unbound by topic or subject (Wilson & Shulman, 1987). It includes *L2 teacher beliefs*, the personal and subjective propositions about the world that may be subjective but that an individual holds to be true (Richardson, 2003) and *L2 teacher expertise,* which ultimately results when an L2 teacher is able to deliberate and reflect upon their classroom experience and performance (Tsui, 2003). These three concepts serve as the bases for the Teacher Domain of TLA

Inquiry about teacher cognition has been a focus of general educational research for almost 30 years. Borg (2006) proffers an extensive review of this research, beginning in the 1970s with the process-product approach to teaching, which entailed examining teachers' behaviors and classroom processes relative to student achievement, i.e., the products resulting from the classroom processes. The 1980s brought a shift in focus to the role of teachers not as models of a predetermined set of "efficient" behaviors that result in student achievement, but as decision-makers who act as such due to a certain degree of teacher knowledge. This shift further evolved during the 1990s to the present day, with a new emphasis on the relationship between and roles of both teacher knowledge and beliefs in the teaching process. Research now focuses on the cognitive processes that underlie pedagogical decision making, which Borg refers to as "the store of beliefs, knowledge, assumptions, theories, and attitudes about all aspects of their work which

teachers hold and which have a powerful impact on teachers' classroom practices" (1999, p. 19).

Areas of research conducted on language teacher cognition include studies on preservice language teachers, in-service language teachers, and the curricular areas of grammar teaching, reading, and writing (Borg, 2005; 2006, p. 46). In fact, language teacher cognition has been an underlying factor in the impetus to "reconceptualize" the knowledge base of L2 teaching for L2 teachers (Freeman & Johnson, 1998); wherein, a greater understanding of what makes language teaching different from other forms of teaching becomes essential to the professionalization of the L2 teacher. This process involves more than simply providing transmissive education about SLA theory, which may be met by teachers with a sense of alienation or resistance should the theoretical orientation present a mismatch with their own previously-held beliefs about language and teaching (Lo, 2005). Indeed, even though L2 teachers may have accumulated extensive knowledge about L2 theory and methods, many fail to actually transfer that knowledge into actual pedagogical practice (Bartels, 2002; 2005a; Bigelow & Ranney, 2005; Borg, 2009; Shocker von Ditfurth & Legutke, 2009). In the proposed reconceptualization, the knowledge base of the L2 teacher should include the experiential and socially constructed knowledge acquired from experience in the classroom (such as that suggested by Johnson, 2006). In addition to knowledge of L2 theory and methods, models for L2 teacher education within this new paradigm should also account for what teachers know from prior experience, how knowledge garnered from this prior experience shaped teachers' classroom practices, and how teachers in turn develop professionally over time (Freeman & Johnson, 1998). Tarone and Allwright (2005) also advocate for professional

development that combines updated pedagogical practices with research findings from SLA.

As it applies to TLA, we may consider this combination of theoretical and a posteriori knowledge a major contributing factor to all three domains of TLA (Cots & Arnó, 2005). A teacher's experience with language is certainly a factor in the development of his or her language proficiency (i.e., the User Domain), but that same experience may also foster metalinguistic awareness of language systems in general, which is a part of the Analyst Domain. In addition, knowledge about how languages are learned and the relationship between L2 theory and the methods employed to facilitate the process of second language acquisition contribute to a teacher's knowledge about language (the Analyst Domain). Collectively, this knowledge contributes to teaching practice (the "teacher" domain). Gaps in subject-matter knowledge (found in the User Domain) and the teacher's procedural knowledge (found in the Teacher Domain) can impact what occurs in a classroom (Andrews & McNeil, 2005). Knowledge of L2 theory may also contribute to an L2 teacher's ability to discern appropriate expectations for their ELLs, as well as analyze what can reasonably be accomplished in school contexts (Lightbown, 1985). Personal experience such as language study or experiences living abroad (part of the User Domain) may additionally affect a teacher's ability to potentially empathize with students and/or recognize the language demands required of their lessons (aspects of the Teacher Domain). In a study that focused on an MA TESOL/TEFL program in the United Kingdom, Edwards and Owen (2005) found that individual circumstances and personal interest played a major role in determining which topics in applied linguistics would be useful or relevant to preservice teachers during their teacher

education programs. Finally, experiential knowledge and professional development over time may contribute to a teacher's ability to communicate about language in such a way that students understand it (i.e., their pedagogical content knowledge c.f. Andrews, 2003, p. 86).

A large body of research on teachers' grammar teaching practices as they relate to teacher cognition was reviewed by Borg (2006). He included 24 studies in his review, 13 of which were from EFL contexts, 10 of which were from ESL contexts in the U.K., Australia, New Zealand, and Singapore, and three studies were from ESL contexts in the U.S.A. Borg (2006) included studies by Popko (2005), Bigelow and Ranney (2005), and Johnston and Goettsch (2000). Methods of eliciting data included classroom observations, interviews, and the task of evaluating texts supposedly written by L2 students and providing written feedback. Two studies emerged as critical in supporting the need for the current study. First, the series of studies conducted in the United Kingdom by Brumfit, Mitchell, and Hooper (1996; Mitchell et al., 1994a, 1994b; Mitchell & Hooper, 1992) found that the grammar practices and teacher cognition among language arts teachers varied considerably from those of foreign and L2 language teachers. Second, Andrews (1997) found that many of the issues in teachers' grammar teaching practices were not due to a lack of declarative knowledge but were more due to a lack of metalinguistic awareness during the teaching process. This research supports the notion that increasing a teacher's declarative knowledge of language does not automatically transfer to teaching, as teachers often find it difficult to transfer their knowledge about language to content-based (i.e., teaching environments requiring content and language integration) instructional practices (Bigelow & Ranney, 2005).

Pedagogical content knowledge. An important construct emerging from general research on language teacher cognition that is relevant to TLA is the notion of pedagogical content knowledge. Shulman (1987) defines pedagogical content knowledge as " . . . the blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organized, represented and adapted to the diverse interests and abilities of learners, and are presented for instruction" (p. 8). As mentioned above, this type of knowledge is distinct from general pedagogical knowledge, which can be defined as the knowledge of pedagogical principles and techniques unbound by topic or subject (Wilson & Shulman, 1987), the language teacher's knowledge about teaching that is the basis for classroom decisions (Gatbonton, 2008), or the general knowledge of basic tenets of classroom organization and management (Shulman, 1986). When language is considered the content or subject matter, pedagogical content knowledge would be the ability to make knowledge about language comprehensible to students. This knowledge is essential to the Teacher Domain of TLA. However, for mainstream teachers of ELLs, pedagogical content knowledge now must become the ability to work with language within a specific content area. In other words, it is the ability to pedagogically relate information about language and content in a way that aligns with their students' needs and abilities.

L2 teacher beliefs. In addition to pedagogical content knowledge, teacher beliefs play a substantial role in language teacher cognition. However, in what Borg (2003, p. 83) terms "definitional confusion," ambiguity exists in what exactly a belief is. For purposes of this study, the distinction made by Pajares (1992) will be used, in which beliefs are distinct from knowledge, as knowledge can be characterized by its cognitive

nature and schematic organization. In addition, a belief may be disputable, less dynamic, and based primarily on evaluation and judgment with affective components that are not necessarily rational. Beliefs also have much to do with individuals' personal conceptions of teaching and learning (Tsui, 2003). Gatbonton (2008) asserts that the knowledge base underlying L2 teacher cognition should address the ways in which L2 teachers conceptualize teaching and learning processes in addition to the knowledge and beliefs that teachers possess about teaching and learning.

Teacher beliefs are an important consideration for TLA, as many studies support the conclusion that beliefs inform actual pedagogical practices (Borg, 2006; Freeman & Johnson, 1998; Pajares, 1992). Knowledge about language in the form of L2 theory may be used to educate teachers and dispel some of the misconceptions surrounding L2 learning, such as the difference in time required to learn basic interpersonal communicative skills (BICS) versus the time required to develop cognitive academic language proficiency (CALP), confusion about whether oral fluency typically associated with BICS constitutes academic language proficiency, and whether or not younger children learn a language faster than older learners (McLaughlin, 1992). Other studies support this position, finding that preservice teachers who had completed more courses in educational linguistics were found to have more open attitudes toward linguistic diversity and L2 development than those who did not (Attardo & Brown, 2005; Rigelhaupt & Carrasco, 2005). Still, language teacher beliefs remain a driving force behind their pedagogical decisions and attitudes toward learners and learning. As such, the current argument is that beliefs about language influence the way teacher behaviors manifest within the Teacher Domain of TLA, and that these beliefs may become apparent during

reflections on language use in classroom situations, in empathizing with students, and in recognizing language demands requirements of the subject matter.

One area highlighted extensively in the literature is the relationship of L2 teachers' beliefs about grammar teaching relative to their actual teaching practices. Eight studies were reviewed that addressed teachers' beliefs about grammar teaching, five of which were in EFL contexts and three which were in ESL contexts in the United Kingdom and Puerto Rico. The methods employed in the studies included questionnaires about teacher beliefs, informal interviews, and one comparison study that examined differences in teacher and student beliefs about grammar teaching. Findings indicate that formal grammar instruction is still valued and promoted, that teachers' experiences had a greater impact on their grammar instruction than theory and/or research, and that teachers' and students' beliefs about grammar teaching differed considerably.

One study particularly relevant to the context of the proposed research is that conducted by Angelova (2005). She studied teachers who were mostly native English speakers in an SLA course that was part of her university's MA TESOL program. Using a pre-/postsurvey format, interjected with mini-lessons conducted in Bulgarian, she found that teachers in her study did not have extensive knowledge about language and language learning, but they did have many preconceived notions about both. She also discovered that these preconceived notions were altered by the presence of the mini-lessons in Bulgarian; wherein, participants noted that they developed a stronger sense of empathy toward second language learners, and empathy is listed above as one of the key components of the teacher domain. Another finding germane to TLA is the result that the teachers, while still at an early stage of developing knowledge about language, were far

from Artistotelian *tabula rasa* or empty vessels to be filled in this area (Hett, 1936; Freire, 1970); the researcher found she could not simply lecture on language and SLA theory but had to consistently relate the theories to teaching experiences. Because her students were lacking L2 language learning experiences, she created those via the Bulgarian mini-lessons. These findings further support the influence of the participants' beliefs and L2 language learning experiences on the development of individuals' teacher domains.

L2 teacher expertise. Andrews and McNeil (2005), Leech (1994), and Thornbury (1997) all posit characteristics of *model* or *good* teachers of language. These characteristics include, but are not limited to, the ability to analyze the grammatical problems that learners encounter, evaluate learners' use of grammar against criteria of accuracy and appropriateness, anticipate learners' learning problems and plan lessons at the right level, deal with error, field questions, earn the confidence of learners with knowledge of terminology, present new language clearly and efficiently. While these are a list of behaviors, they do not necessarily define teacher expertise. However, no specific set of criteria for defining an expert language teacher exists. According to Tsui (2009), this may be for a number of reasons. First, teaching is always situated within a particular context, making the development of objective criteria that would work in every context extremely difficult. Second, certain dimensions of what constitute effective teaching are highly culture-specific, such as the value of close personal relationships with students, or an extended commitment to subject matter knowledge. Third, differences in assessment standards across contexts contribute to the definition of expertise in different ways; for

example, in the U.S., a current emphasis on accountability places a high value on expert teachers as those who are able to produce favorable student outcomes on assessments.

Further confounding the notion of L2 teacher expertise is the approach toward the term *teacher expertise* itself—whether one views expertise as a *state*, or a *process* (Tsui, 2009). From the literature viewing teacher expertise as a state, certain characteristics of *expert* teachers have emerged. These include the ability to exercise autonomy in decision making; respond flexibly to variations in context while anticipating difficulties and having plans to deal with those difficulties; plan lessons efficiently and briefly; integrate one's knowledge base to establish coherence among lessons; recognize students as groups and individuals; recognize patterns in classroom events and interpret them in meaningful ways; be selective about what they attend to in the classroom; improvise by generating examples, illustrations, and explanations with automaticity and effortlessness; and reflect upon, analyze, and justify practices in a principled manner (Tsui, 2009).

In looking at expertise as a process, rather than a state, four additional characteristics of an expert teacher emerge, as illustrated by Tsui (2003). In order to continually develop expertise, there must be an interaction between an individual's theoretical knowledge base and his or her practical knowledge base. The expert must also be able to perceive pedagogical constraints or problems, and use them for student learning. In addition, the expert individual must be able to examine more profoundly less-defined problems and address them at a deeper level, as well as to invest the mental resources that are freed up (due to their highly efficient routines and automaticity in the classroom) to push themselves to their own boundaries and learn new skills in new areas.

As mentioned previously in the definition of TLA, the three domains of TLA are indeed integrated, and may ultimately represent the expertise that a language teacher must have as a user, an analyst, and a teacher. Highly skilled teachers, or experts, demonstrate characteristics of a knowledge base in which teacher knowledge and context are integrated (Tsui, 2003). There is also overlap between definitions of L2 teacher expertise and the importance of metacognitive processes such as reflection on their personal and professional experiences, which Tsui (2003) claims may result in a more informed practice, more deliberately identified beliefs and practical knowledge, and heightened ability to articulate what they know.

As such, the argument that a certain degree of expertise as defined by Tsui (2003; 2009) is part of the Teacher Domain of TLA can be made. Due to the complex nature of TLA and its overlapping domains, the ability of an L2 teacher to recognize ambiguities and combine elements of TLA to synergistically perform in classroom contexts is an essential component.

Noticing and attention. Noticing and attention also play foundational roles in teacher expertise relative to TLA. Schmidt's noticing hypothesis (1995) highlights the role of noticing in the L2 acquisition process. He asserts that target language forms will not be acquired if the learner never notices them; therefore, the learner must possess some degree of awareness about language. The ability to notice language structures in the input is also important to the development of TLA. If L2 teachers do not possess enough language awareness to focus students' attention on specific target language forms, the students may not necessarily notice them on their own given the limitations of input in classroom environments. Instructed SLA requires L2 teachers to structure language input

for ELLs; yet, the process of structuring language input for pedagogical purposes puts great demands on teachers' language awareness (Andrews, 2007).

Input and interlanguage. L2 teachers' metalinguistic awareness plays a large role in the structured input to which they expose their learners in L2 learning contexts (Andrews, 2001), with input being defined as the language samples to which the learner is exposed. Teacher expertise also necessitates an awareness of the L2 learner's interlanguage (i.e., the learner's present level of language development). Knowledge of a student's interlanguage may help the L2 teacher more accurately gauge the level of input that needs to be provided to the student, as well as maintain reasonable expectations of what their L2 learners should be able to produce at a given level of language proficiency (Andrews, 2007, p. 29). Input with regard to TLA needs not be limited to the traditional views of information processing; it may also influence teachers' decisions about scaffolding and other processes that would further develop the learners' interlanguage (Andrews 2007, p. 37). In addition to being empathetic to the L2 learners' experiences, another aspect of the input and interlanguage is that L2 teachers must also be able to identify the potential demands on language inherent in their lessons (Dong, 2005; Echevarria, Vogt & Short; 2012; Fang, 2006). Despite a call for teachers to perform this skill, Bigelow and Ranney (2005) found that this was very difficult for PSTs who were able to add context to a designated language skill more easily than they were able to extract the language demands from a designated context. Ultimately, teachers must draw upon their metacognitive skills to develop linguistic and pedagogic sensitivity to learners' needs (Wright, 2002, p. 123); however, L2 teacher educators must realize that this is a difficult skill to develop.

Conceptualizing the Domains of TLA

In this section, I present a conceptualization of TLA that draws from the prominent perspectives of language awareness as proffered by Andrews (2007), Borg (2006; 2009), and Wright and Bolitho (1993) among others; yet, I situate TLA not as another item in the list of constructs that makes up teacher cognition but as its own construct with teacher cognition at its core. I believe this centrality of teacher cognition, lying where the three domains of TLA overlap, represents the notion that language awareness and its operationalization in each of the three domains is central to nearly everything that teachers, both L2 and mainstream, do in 21st century classrooms.

In Figure 2.1 the domains of teacher language awareness (i.e., the User, Analyst, and Teacher Domains) are presented as overlapping circles with all circles overlapping at a central point forming a composite of the domains known at language teacher cognition (LTC). Although the literature on TLA suggests that the domains are linear or hierarchical, the researcher believes that Figure 2.1 provides a better fit for the development of TLA. In the literature on TLA, the User Domain encompasses language proficiency, the use of language within its societal and pragmatic norms, implicit language knowledge, and procedural language knowledge. However, it also includes the user being able to implement repair or reformulation strategies during communicative acts. The ability to use these strategies requires a certain degree of metalinguistic awareness; therefore, in this regard, the User Domain overlaps with the Analyst Domain. Another area of overlap between the User Domain and the Analyst Domain exists as the user becomes aware of the varieties of his or her own language. Areas where the User Domain overlaps with the Teacher Domain occur as User Domain expertise comes about

as a result of experiences in a classroom setting, such as how personal interactions with L2 speakers provoke a curiosity about how people learn languages. Sensitivity toward linguistic imperialism, listed in the literature as part of the User Domain, may also come about as a result of being a teacher. For example, a teacher may not be aware of the power dynamics that exist among language groups until actual speakers in their own classrooms represent those and teachers experience firsthand how those power dynamics play out among their own students.

Characteristics of the Analyst Domain as illustrated in Figure 2.1 include knowledge about language (its forms and functions); knowledge about the subfields of linguistic, such as syntax, phonology, morphology, semantics and pragmatics; explicit language knowledge; declarative language knowledge; and metalinguistic awareness. These characteristics contribute to areas of the Analyst Domain that also overlap with the Teacher Domain. For instance, the ability to solve language problems (traditionally associated with the Analyst Domain) is also an important part of the Teacher Domain as ELLs in a classroom may present a teacher with questions about language or make L2 errors that require the teacher to solve language problems in order to provide clarification or appropriate instruction to the student. The interaction of the Analyst and Teacher Domains is also apparent in the teacher's awareness of an ELL's interlanguage. This awareness translates in the teacher being able to structure input and output opportunities at appropriate levels of input for the L2 learners. In addition, the Analyst Domain requires a high degree of metacognitive reflection on language in general; yet, the Teacher Domain also requires this same degree of metacognitive reflection on the

teaching process. According to Tsui (2003), teacher expertise is actually defined by the individual's ability to reflect metacognitively on teaching practices.

Also resulting from an overlap of the Analyst and Teacher Domains is the ability of the teacher to recognize the language demands inherent in the content of the lessons. This requires awareness of language, but it is more specific in that it requires awareness of the language that occurs in instruction as it relates to content; consequently, it includes language that is both interpersonal and communicative, as well as cognitive and academic. Finally, another area in which Analyst and Teacher Domains overlap is in subject-matter knowledge. For L2 teachers, explicit knowledge about language is a large part of their subject-matter knowledge, i.e., the knowledge they are formally imparting to students. For mainstream teachers, subject-matter knowledge has traditionally been knowledge specific to the content areas of math, science, social studies, and language arts in the form of literature, reading, and instruction on writing. However, mainstream teachers must now possess subject-matter knowledge about the traditional content areas as well as subject-matter knowledge about language.

Last, the Teacher Domain, as defined by the preceding literature review, includes pedagogical content knowledge that enables a teacher to adapt specific content information and convey it through pedagogical means to align with (a) students' needs and abilities (Shulman, 1987), (b) general pedagogical knowledge of classroom principles and techniques unbound by topic or subject (Wilson & Shulman,1987), (c) L2 theory and knowledge derived from coursework or professional development, (d) empathy for the ELL experience as ELLs navigate dual cultures and languages, and (e) teacher expertise resulting from skill development that occurs due to processes of deliberation and

reflection upon classroom experience and performance (Tsui, 2003). One area of overlap between the Teacher and the User Domain is that of the individual beliefs, both about language in society (User Domain) and language use in the classroom (Teacher Domain). Particularly with preservice or novice teachers, these beliefs are personal and subjective propositions about the world that PSTs hold to be true (Richardson, 2003) and may be idealistic, traditional, and loosely formulated. The fact that beliefs overlap both the User Domain and the Teacher Domain indicates that they influence how one uses language in multiple contexts—generally, in society and specifically, in the classroom. An individual's life experiences will also contribute to both how she or he uses language and also influence pedagogical practices; as such, life experiences can also contribute to the development of TLA in both Teacher and User Domains.

Figure 2.1 presents a reconceptalization of different facets of TLA supported by research in applied linguistics and in L2 teacher education and serves to both distinguish the characteristics of each domain of TLA as represented in various sources in the literature. It also serves to illustrate the nuanced interconnectedness as these different facets contribute to language teacher cognition as a whole.

Conclusion

This brief review of literature on TLA recognizes the construct as a composite of language proficiency (the User Domain), knowledge about language (the Analyst Domain), and teacher cognition (the Teacher Domain). In addition to expounding upon these three domains, the review has established a rationale for conducting research on TLA among mainstream teachers who plan to work in U.S. K-12 public schools with

ELLs. The primary impetus for conducting such research among mainstream teachers (as opposed to continuing the TLA research history of only examining L2 teachers) is because of the burgeoning numbers of ELLs in K12 public schools and the fact that their lack of academic success places the entire system at risk. While traditionally, ESL specialists (L2 educators) performed the explicit English language education in K-12 schools, the increased number of ELLs dictates that accountability for their education be diffused across all educators.

However, implementing this accountability feature is problematic because the pedagogical knowledge bases of L2 educators and mainstream teachers differ. One of the ways they may differ is in their overall degree of TLA; yet, how much they differ with regard to TLA remains to be seen because so little research on TLA among mainstream teachers exists and even among L2 teachers, understanding the development of TLA is complicated. TLA research among L2 teachers has found that TLA includes not just speaking a language, but also being aware of linguistic and dialectical diversity, developing metalinguistic awareness, possessing subject-matter knowledge about grammar, integrating content and language goals, implementing theory-based practices when teaching language, and reconciling theory with personal beliefs and values stemming from life experiences. If research supports that L2 educators have difficulty with the aforementioned areas, it may be safe to assume that mainstream educators with very little exposure to applied linguistics coursework would fare even worse. Thus, in order to more effectively educate mainstream teachers in L2 pedagogy, it is crucial to obtain more insight into the degree of TLA mainstream PSTs actually possess and how coursework may affect its development.

Research Questions

The following research questions govern the proposed study.

1. What is the baseline of TLA held by preservice mainstream teachers enrolled in university-level courses on L2 education in the United States?
2. How does the degree of TLA change over time between preservice teachers who have completed an L2 methods course with incidental instruction about TLA, and those who have completed an L2 methods course with deliberate instruction about TLA?
3. What are the attitudes, perceptions, and experiences that underpin the degree of TLA held by preservice K-12 teachers both before and after incidental and deliberate approaches to TLA development?

I hypothesize that:

1. The preservice mainstream K-12 teachers in this study will exhibit low degrees of TLA before beginning focused L2 methodology coursework.
2. The degree of TLA will differ among preservice mainstream teachers who have completed a course on educating ELLs with incidental instruction about TLA (the control group) and those who have completed a course designed to deliberately develop TLA (the experimental group). I also predict that participants who have completed the course designed to deliberately develop TLA will present significantly higher degrees of TLA than participants enrolled in the incidental course.

3. The attitudes, perceptions, and experiences that underpin preservice mainstream teachers' degree of TLA will be prominent in their conceptualization of language awareness and their orientation towards working with language learners.

The insights gathered during this study will serve L2 teacher educators as they collaborate with mainstream teacher educators to design appropriate coursework for developing language awareness in mainstream teachers. Research from L2 teacher education may indeed support mainstream educators as they experience the paradigm shift from pedagogy designed principally for native speakers of English, to methods designed to more effectively educate culturally and linguistically diverse learners. The methodology I employed in order to answer these research questions is detailed in the following chapter.

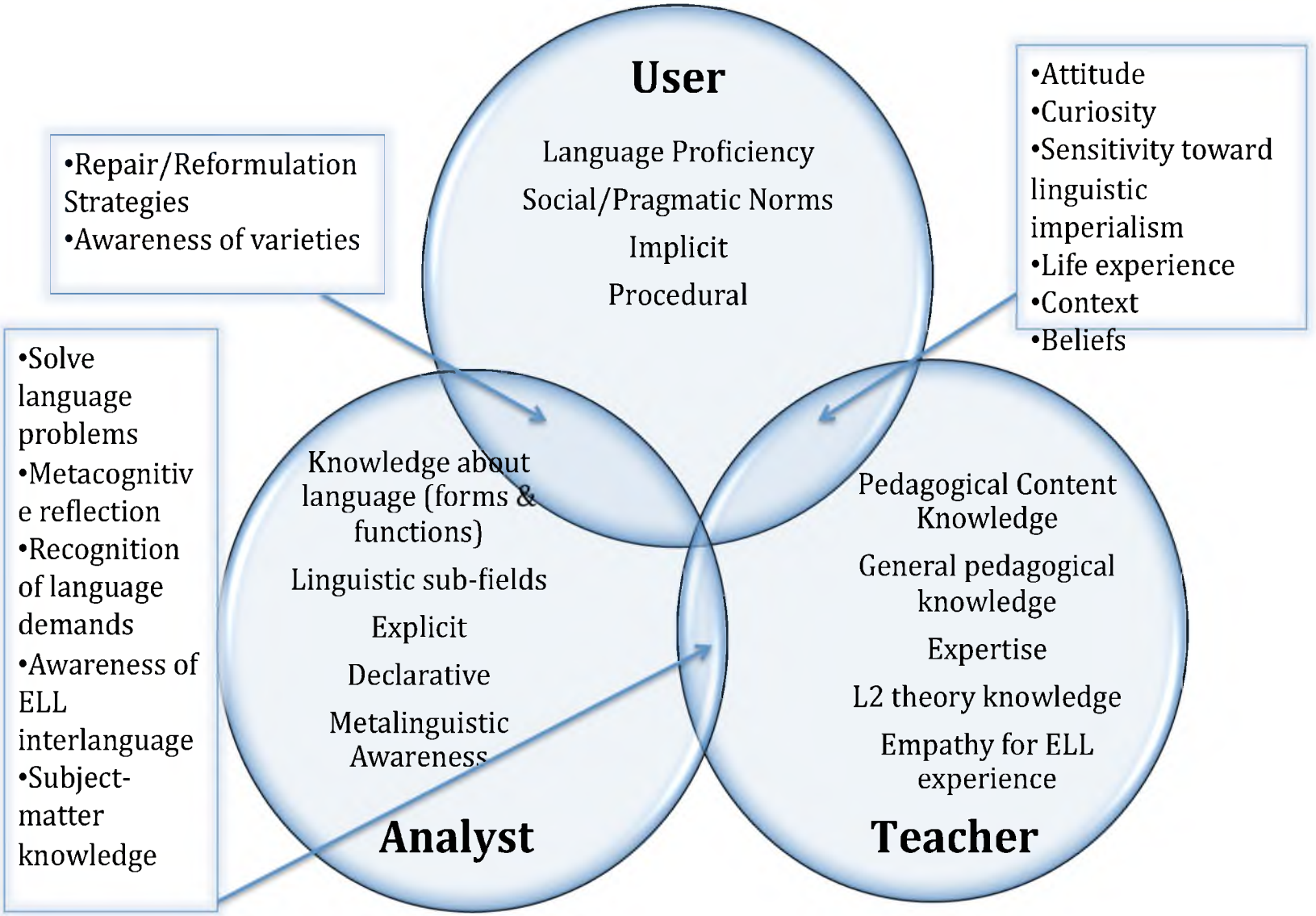

Figure 2.1 Overlapping Domains of TLA

CHAPTER 3

RESEARCH METHODOLOGY

In consideration of the complex nature of TLA, the methods employed to examine it must also be designed to address such intricacy. In an extensive review of the methodology used to research applied linguistics relative to L2 teacher education, Bartels (2005a) asserts that teacher knowledge is more complicated than just knowing and using facts about language and language learning, and that to effectively research teachers' practices relative to language, a variety of methodologies is necessary. Four data collection methods are emphasized in Bartels' review: observation, documentation, reports/introspection, and tasks. Observation might include observation of teaching, observation of L2 teacher education classes, and participant observation. Documentation encompasses the collection and analysis of teaching artifacts and/or teacher education artifacts. Reports and introspection can be seen in interviews, questionnaires, journals, metaphors, narratives, biographies, think-aloud protocols, and stimulated recall. Tasks might include problem-solving tasks, reaction to stimuli, memory tasks, knowledge organization tasks, sorting tasks, and concept mapping.

Rather than rely on a single set of data, the current quasi-experimental study used a variety of instruments and data collection methods as Bartels (2005a) suggests. Through

the utilization of a questionnaire, two problem-solving tasks, teacher artifacts, and semi-structured interviews, the mixed-methods approach attempted to "draw from the strengths and minimize the weaknesses of both [quantitative and qualitative approaches]" (Johnson and Onwuegbuzie, 2004, p. 14). Before detailing the research procedures; however, I outline my own orientation toward the proposed research in order to better ground and contextualize the study itself. Following this explication, I describe the overall research design, the context, the participants, the instrumentation, the procedures, and the proposed data analyses.

Researcher Orientation

Underlying the proposed research is the notion that, as part of the professionalization of the L2 teaching field, teacher beliefs and cognitive processes must be accounted for (Freeman & Johnson, 1998). This perspective stems from a recognized need for teachers to undergo extensive professional preparation as well as to conduct research on their classrooms and their beliefs about language teaching (Bartels, 2002). While professional preparation of teachers may be standardized in some ways, teachers are individuals who have varying realities that will contribute to the development of their values and beliefs. These same values and beliefs are supported by research central to teachers' decision making processes (Pajares, 1992; Tsui, 2003)-- even more influential than actual knowledge about L2 theory and effective teaching methods. It follows that an examination of teacher knowledge must look in depth at the complexity of all factors that constitute teacher knowledge, which ultimately influences the processes teachers execute in the classroom.

Another view underpinning the proposed research methodology stems from a definition of the field of applied linguistics itself. Brumfit (1995) defined applied linguistics as "the theoretical and empirical investigation of real-world problems in which language is a central issue" (p. 27). With this definition in mind, the researcher sees herself as not only a researcher of language, but also a researcher of language in practice. In other words, I am an observer of the role language plays in the very real issues facing teachers and English Language Learners (ELLs) in public schools. The researcher also approaches the proposed study from the epistemological view that being an applied linguist requires (a) knowledge of language and (b) knowledge of how to teach language (Bartels, 2002) and has designed the study to examine the interplay of both of those factors.

Undergirding all research are the ontological and epistemological orientations of the researcher herself. Hatch (2002, p. 13) categorizes these orientations into five central paradigms: positivist, postpositivist, constructivist, critical/feminist, and poststructuralist. The positivist paradigm explores the nature of reality as something concrete that can be studied, captured and understood, with a distinct relationship existing between the *knower* and the *known*. Methodology employed to conduct research from the positivist paradigm includes experimental and quasi-experimental designs, survey research, and correlational studies, which typically produce facts, theories, laws, relationships and predictions. The postpositivist research paradigm explores the nature of reality as something that does exist, but can only be approximated, and within that approximation the researcher is an instrument of data collection himself or herself. Knowledge is gained

via rigorously defined descriptive methods, frequency counts, or low-level statistics, which tend to result in generalizations, descriptions, and patterns.

The constructivist paradigm's ontology allows for the construction of multiple realities, acknowledging knowledge as constructed by humans; consequently, the researcher and participant(s) construct understandings of reality together. Constructivist methodology often includes naturalistic and qualitative data collection methods like interviews and observations that result in case studies, narratives, interpretations, or reconstructions. The critical/feminist paradigm explores reality in terms of race, gender and class, with knowledge seen as subjective and political. In this paradigm, the researcher's values influence the inquiry itself, which results in what Hatch terms *value-mediated critiques* that strive to challenge existing power structures and encourage resistance to those power dynamics (2002, p. 13). Finally, the poststructuralist paradigm operates with the nature of reality as a construct embedded in an individual's mind—there is no *truth* to be discovered, but only an examination of the world through various textual representations and various lenses. Poststructuralist methods and their results include deconstruction, genealogy, and multivoiced studies.

The constructivist paradigm as described above ultimately undergirds the design of the proposed research. Ontologically, I subscribe to the notion that multiple realities exist as to the nature of TLA and that these realities are largely influenced by the vantage point from which each participant in the proposed study views teaching, his or her life experiences, and language development and use in general. I also acknowledge that, epistemologically, the knowledge constructed during the course of this study cannot be deemed objective. As the researcher, I am a member of various social groups, which

include U.S. public school ESL specialist, holder of ESL endorsements and TESOL degrees, L2 teacher educator, applied linguist, additive English/Spanish bilingual, and granddaughter of Mexican immigrants, to name a few. Consequently, I have used my perspective and experiences to determine what relevant problems to study, how to select and develop instruments that I believe have measured what I deemed the target constructs, and how to choose the assessments and items for measurement (Johnson and Onwuegbuzie, 2004). However, as an L2 educator and researcher both, I believe strongly in mutual engagement—engagement that occurs as the researcher and participants explore their subjective realities together.

The multiple realities experienced by both researcher and participants (and thus those influencing their performance on the first two tasks of the study) have been explored in depth. In the final phase of the study procedures, I conducted focus-group interviews with participants, allowing me to use my own perspective and draw on my own resources as a teacher educator to make sense of their experiences through my own lens. Using the narrative created by these interviews, I proffer additional insight into teacher behavior and cognition with specific regard to the development of teacher language awareness. The type of knowledge generated from the interviews was meant to capture a part of teacher cognition, as it is develops via preservice mainstream teachers' university coursework experiences.

Contextual Factors

Context played an integral role in ascertaining the participants' views on TLA and how their life experiences contributed to it. The research was situated in an urban context

that was home to extreme linguistic diversity, with refugee groups from Sudan, Somalia, Afghanistan, Iraq, and Laos, among others (Refugee Services Office, 2009). Like many other parts of the U.S., the Spanish-speaking population has experienced rapid growth in this context, typically about 100-200% over 5 years (Short & Fitzsimmons, 2007). As such, the urban school district for this area reports over 80 languages spoken in the district to date (Salt Lake City School District, 2011). The study participants, as members of the urban community, had been exposed to media coverage of linguistic diversity in the city, along with reports on immigration policy and refugee services. Therefore, they likely held their own perceptions about linguistic diversity that had been developed outside of their classroom experience at the university.

Participants

K-12 mainstream PSTs (n=116) who were nearing completion of their undergraduate degrees in education participated the current study. To complete the Bachelor's degree in education with a teaching major, all participants were required to take courses that prepared them for working with ELLs and therefore complete the English as a Second Language (ESL) endorsement requirements. One of these courses was designed to teach L2 methods for ELLs specifically in a public school setting. Another newer course was designed to teach about language and promote language awareness in the context of public education. Due to the contrasting approach to language awareness presented by these two courses (the first being an incidental approach and the later being a deliberate approach), participants were recruited from these two courses for purposes of comparison. Membership in each of these courses became the dividing point

for the deliberate (experimental) and incidental (control) groups; participants were not randomly assigned to experimental and control groups. The study participants were of mixed gender, between the ages of 18 and 50 years old, and native speakers of English.

Only native speakers of English were chosen for the study for several reasons. First, it is established in the literature that non-native speakers (NNS) of English may have different degrees of TLA in the various domains. They may experience more difficulties than native speakers (NS) in terms of the User Domain and language proficiency; yet, they might surpass their NS counterparts in terms of metalinguistic awareness. The development of metalinguistic awareness is a potential benefit of having explicitly studied a second or foreign language (Anderson, Clapham, & Steele, 1997). NNSs may also possess heightened levels of cultural awareness, either from their own experiences as culturally and linguistically diverse learners, or from experiences living outside of the United States, all factors which may influence their scores on the study tasks. The researcher in no way wanted to propagate a NS/NNS dichotomy that promotes an NS as the norm or ideal for language learning over an NNS (Murray & Christison, 2011). In selecting native speakers of English for the study and excluding non-native speakers, the researcher simply wished to reflect a typical preservice teaching population for the local context—White, middle class, monolingual, native speakers of English—represented by the sampling of participants in the current study. Both courses from which the data sampling occurred were required for the PSTs. Participants who were concurrently enrolled in both courses or who had taken one of the two courses prior to the start date of the study were excluded from the sampling.

Participant Profiles

Ultimately, data were collected from 116 participants in this quasi-experimental study (58 in the incidental group and 58 in the deliberate group). To control for variables related to previous coursework, teaching experience, and language learning experience, the participants were surveyed using a questionnaire (see Appendix A). The results from the questionnaire were important because they helped answer the question, "Who are the teachers being educated to work with ELLs?" in terms of what these teachers know about language, what courses they are taking to help them learn about language and language learners, and what experiences they may have had that contributed to their language awareness. Participants in both groups were strikingly similar. Questionnaire results from the participant group as whole are discussed in the section below, while a comparison of each questionnaire item by incidental group and deliberate group can be seen in Table 3.1.

Coursework and endorsement. Most participants were in their final or penultimate year of their teacher education coursework. Elementary or secondary education was the primary course of study for most participants, with a few reporting interest in becoming Special Education educators, or ESL specialists. Those reporting interest in becoming elementary educators surpassed those who reported interest in becoming secondary educators, and the deliberate group contained most of the secondary preservice teachers. Of the preservice secondary teachers, most planned to specialize in social studies, followed by English language arts, and world languages other than English. Most participants were seeking an ESL endorsement. One principal difference between groups was that more participants in the incidental group reported having

completed an introduction to linguistics, educational linguistics, and multicultural education courses than the participants in the deliberate group. Differences in background knowledge did not affect the significance of the statistical analyses, as can be seen later in this chapter. Other education-related classes completed by participants in each group prior to their participation in the current study can also be seen in Table 3.1.

Previous teaching experiences. Participants reported no formal prior teaching experience of any kind. Of those who did report prior teaching experience, their contexts were primarily informal, including classes such as dance, ceramics, or after-school tutoring.

Language learning experiences. Language learning was a part of most participants' background experiences, as 74% of all participants reported having studied a foreign language. The most frequently studied language reported was Spanish. The average time of language study for all participants was 3.59 years, and those who reported having spent an extended time period in a non-Anglophone country said they were there for an average of 1.68 years. Despite these years of study and time abroad, the majority of all participants rated themselves as having "limited/beginning" proficiency in the language(s) that they had studied. Only 4.3% of participants rated themselves as having fluent proficiency in the language(s) that they had studied, and only 6.1% of all participants reported a language other than English being present in their home environment.

Instrumentation

The General Questionnaire

The participants first completed a general questionnaire (Appendix A) that addressed their educational experiences prior to their current course work, such as their current course enrollment and extended language learning experiences, including whether they themselves were bilingual or had lived abroad for an extended period of time. The purpose of the questionnaire was to aid the researcher in identifying variables such as life experiences or prior schooling that might have been variables affecting the participants' degrees of TLA. The researcher considered these variables when analyzing the quantitative and qualitative data, and discusses their possible effects in Chapter 5: Discussion.

The User Domain Task

In this case, the User Domain was controlled for by the inclusion of only native speakers of English. While being a native speaker does not automatically qualify someone to teach English to a speaker of another language, the researcher was comfortable assuming that given their admission to a university and their acceptance to a teacher education program, the participants had a relatively standard command of English language proficiency and the social/pragmatic norms expected of K-12 classroom teachers. Therefore, no User Domain task was used in this study.

The Analyst Domain Task

The task representing the Analyst Domain of TLA was designed to operationalize metalinguistic awareness of English in terms of teachers' knowledge about language (KAL), specifically grammar and conventions. The Analyst Domain task follows as Appendix B, and was replicated with permission from Bigelow and Ranney (2005). It consisted of a short content-area social studies reading passage designed at approximately the 6th grade reading level. Using a list of the names of 20 grammar or conventional constructions that were present in the sample text, the task required participants to identify where in the text each grammar/conventions construction was found. This task was employed for several reasons.

First, the researcher chose this task because its use had already been proven in the Bigelow and Ranney study (2005), which examined how preservice teachers transferred their KAL to lesson plans, with specific regard to the types of language that teachers noticed in content-area text as a precursor to writing language objectives. They argued, and the researcher agrees, that content-area teachers must be aware of not only the "macro" levels of language demands presented by public school content-area lessons, such as listening, speaking, reading, and writing, but also the "micro" levels of language demands, such as vocabulary, grammar, conventions, linguistic systems, etc. that constitute knowledge about language (KAL). While KAL was a construct previously only associated with the subject-matter knowledge of language teachers, due to the amount of ELLs in the typical public school classroom, it is now central to the general educator's knowledge base as well (Wong-Fillmore & Snow, 2002).

For example, teachers need a certain amount of KAL to make decisions in the classroom, such as how to develop or adapt curriculum for ELLs, down to details such as how to assess students and offer formative feedback on their daily written and oral language production. In addition, each content-area discipline characterizes itself through the use of particular grammatical forms and functions in order to allow members of that discipline to accomplish communicative tasks and share information (Schleppegrell, 2010). Thus, knowing about grammar and conventions is not knowledge reserved only for English Language Arts (ELA) educators or confined to ELA lessons, but is an essential skill for all educators as they essentially teach the language (including the grammar forms, functions, and conventions) of the content areas.

The Analyst Domain task was evaluated by trained raters with graduate-level backgrounds in linguistics. They were provided with an answer key that listed all instances of the particular grammar construction that appeared in the text. They then decided if the participant's answer was correct by comparing the answer to the key. For example, one item in the Analyst Domain task read, "passive verb." So, the participant had to list the paragraph number or circle a construction that was an example of a passive verb form. If passive verb forms were found in paragraphs 1, 3 and 5, the reviewer's key would reflect that. If the participant either wrote "Paragraph 1" or circled the passive verb in paragraph one, the answer would be considered correct. If the participant wrote a paragraph number that did not include that form, did not circle the form, wrote "don't know," or left the item blank, the reviewer would consider that an incorrect response. The reviewers then recorded which items each participant identified correctly, those which they identified incorrectly, those which they marked "Don't know" (or similar), and those

which they left blank. Each participant was then given a raw score, which was their number of correct identifications out of 20 possible items. During rater training sessions with the researcher, joint probability of agreement was high (99%) due to the concrete nature of the grammatical constructions and conventions listed as items on the Analyst domain task.

The Teacher Domain Task

The task representing the teacher domain of TLA was designed to operationalize teachers' ability to empathize with language learners' experience by measuring participants' ability to recognize the linguistic demands of content-area text. This task also presented a sample content-area reading text written on a 6th grade level, but on a different social studies topic. Participants were asked to read the text and identify the language demands that the text may have presented to ELLs by listing them below. The task did not provide any preconceived categories to the participants; they were simply asked to list any language demand they could identify. The teacher domain was operationalized in this way due to the growing need of content-area teachers to be able to decide which features of language could (and should) be foci of content-language integrated lessons. Teachers also need to know enough about the language inherent in their lessons in order to estimate what students may have questions about, and to be able to answer questions that may arise from L2 learners (Bigelow & Ranney, 2005; Wong-Fillmore & Snow, 2002; Wright, 2010). Thus, this task mimics that cognitive processes that a teacher would undergo as (ideally) he would decide on a content-area topic (in this case, social studies), then choose a text about that topic (in this case, the text was

provided to the participants), analyze the text to see which linguistic demands it presents for learners (in this case, the Teacher Domain task), and subsequently decide how he might address those demands in a lesson (not examined in the current study). The complete Teacher Domain task is found as Appendix C and was replicated from a pilot study (Lindahl, Baecher, & Tomas, in press).

The Teacher Domain task was evaluated by trained raters with Ph.D.-level backgrounds in L2 pedagogy. Raters were trained by the researcher to employ deductive analysis (Drew, Hardman, & Hart, 1996), wherein a set of predetermined categories of language demands was used to analyze how many different language demands the participants were able to identify. As such, from a review of literature on language demands of content-area lessons, the researcher identified the categories of content-compatible vocabulary, content-obligatory vocabulary, general vocabulary, background knowledge, grammar, conventions, reading strategies, text difficulty, word study, and functional language (Bigelow & Ranney, 2005; Chamot, 2005; Echevarria, Vogt, & Short, 2012; Fisher & Frey, 2010; Graves, 2008; Regalla, 2012; Schleppegrell, 2004; Snow & Brinton, 1997).

A record sheet (attached herein as Appendix D) provided to each rater included a definition of each category along with several examples of identified language demands from the social studies text that would fall into the respective categories for rater reference. Raters were then instructed to read participants' responses and write the actual words/phrases/ sentences that the participant wrote into the corresponding category on the rater record sheet. They then counted how many language demand categories out of ten possible ones that the participant identified, rather than counting the number of terms

in each category that the participant identified. Raters were then told to assign each participant a raw numerical score out of ten possible, e.g., if a participant identified terms from or mentioned content-compatible vocabulary, background knowledge, and text difficulty, their score would be a 3 out of 10. Following the training, the researcher provided the raters with sample data from participants in order to conduct joint probability of agreement discussions. Then, using actual data from the participants, joint probability of agreement was calculated for the raters on the Teacher Domain task by dividing the number of times that raters agreed on a score by the total number of items, and was consistently higher than 90%, i.e., over 90% of the time, all the raters agreed as to which category of language demand a particular response belonged. The Teacher Domain was also controlled for by the exclusion of participants who were taking the courses concurrently or who had taken either one of the courses previously.

Reflections and Interviews

Participants were asked to complete short reflections following each of the TLA tasks. In addition, semistructured focus group interviews were conducted with participants from both the incidental and deliberate groups who were selected randomly from a list of participants who had noted their willingness to be interviewed about their experiences. The interviews were semistructured; as such, the researcher began the interview with a set of questions in mind, and allowed responses to evolve from these talking points. The list of questions included a general question about what TLA was and why there would be a course on it, which corresponds to the first written reflection that participants completed at the beginning of the study, as well as five questions that

addressed the Analyst Domain of TLA, and five questions that addressed the Teacher Domain of TLA. The list of questions follows in Table 3.2, with the specific domain addressed beside the question in parentheses. A follow-up question regarding the participants' perceived level of challenge experienced during the class, as well as one inquiring as to the usefulness of the course were also implemented. The questions were asked in random order each time to lessen the effect that the order may have had on the participants' responses. The interviews lasted between 45-60 minutes. All interviews were recorded digitally and transcribed using iMovie.

Procedures

First, the participants were identified as being members of the group exposed to the incidental approach to TLA, or as being members of the group exposed to the deliberate approach to TLA. They are subsequently referred to as either "incidental group" or "deliberate group" participants throughout the rest of the study.

In order to answer the first research question about a baseline of TLA, all participants completed the questionnaire, a written reflection, the Analyst Domain task, the Teacher Domain task, and another written reflection at the beginning of the semester. The first reflection asked, "Why do you believe this class on teacher language awareness is required by the [teacher education program]?, and the second asked participants, "How did you feel while completing these tasks? Was there anything that surprised you about your knowledge?" The researcher then collected these five items, and participants completed the required semester-long coursework for the course in which they were

enrolled, with either the incidental or deliberate approach to TLA. The courses are described in the following section.

Participation in Courses

The State of Utah does not require that K-12 public school teachers hold an ESL endorsement; however, a number of public school districts now require the endorsement for new hires. Consequently, in response to increasingly high levels of linguistic diversity statewide and local district requisites, the University of Utah restructured its teacher education program so that the requirements for the State ESL Endorsement have become part of the basic licensure requirement for all PSTs. The two courses that were used as part of the study are a part of the ESL endorsement sequence, and are described below and identified in terms of their approach to TLA, namely incidental vs. deliberate, with the incidental course serving as a control group, and the deliberate course serving as an experimental group.

For purposes of this study, "incidental learning" is defined as the process of teaching via naturally occurring stimuli (McGee, Krantz, & McClannahan, 1986); more specifically, in the current study's context, the process of teaching about language in the "incidental course" occurred when student-generated questions or concerns arose, but not necessarily through preplanned focus on language at a micro level. For example, in the incidental course, the professor conducted a lesson on the language demands of content area text, and then gave six sample areas of language demands, such as grammar, vocabulary, conventions, etc. While the professor explicated each of the language demands, she did not design focused pedagogical tasks around each one. If students

asked questions or expressed a lack of clarity on any of them, then the professor would address them. However, if students in the incidental course did not request that level of detail about language (i.e., via naturally occurring questions they might have), then it was not addressed explicitly.

Traditionally, it has been assumed that teachers can develop TLA without deliberate instruction because most ESL endorsement programs include L2 methodology courses, courses on culture and diversity, program and curriculum design, content and language integration, and assessment (Harper & De Jong, 2009; USOE, 2013). Yet, many of these courses and/or course sequences or endorsement programs lack courses that specifically focus on the deliberate development of teacher language awareness. It is not entirely known why this absence of any TLA course is the current norm, but some possibilities include the fact that a majority of the teachers in U.S. public schools are native speakers of English, so program and course designers may have felt that less attention to the English language itself would be required, i.e., that because, as native speakers, most teachers can employ grammatical structures correctly, they should also be able to identify them and apply them to pedagogy. It may also be assumed that preservice teachers learn about language during classes that focus on the integration of content and language in pedagogy, yet often the primary focus of these courses tends to emphasize sheltering content rather than explicitly teaching language (Lindahl, Baecher, & Tomas, in press). A third possibility is that, in the past, ELL education was the primary responsibility of ESL specialists or, at the secondary level, a combination of the ESL specialist and the English Language Arts (ELA) content-area teacher. Both of these individuals would (in theory) have high levels of knowledge about language. As such,

teachers in the other content areas or those who were not ESL specialists would not need to know as much about language, and would likely instead focus on ways to make their content more accessible than to actually teach language.

As a result, typical ESL endorsement courses and course sequences for content-area teachers are often characterized by traditional incidental approaches to teacher language awareness. However, the aforementioned separation of duty among content-area teachers and ESL specialists has been nullified by the large numbers of ELLs in public school, which now require that educators share the responsibility for developing academic language among ELLs. Although the study of the construct of TLA has been present in the L2 pedagogy field for some time, it has been less studied in the realm of ELL public school education due to a lack of deliberate approach to TLA.

Developing TLA incidentally. The deliberate course is a semester-long course in the teacher education program that PSTs take in the third year, prior to their final year of courses in their teacher education cohorts and semester or yearlong student teaching experiences. This course serves as an examination of approaches and methods used in teaching ELLs in K-12 public school environments, as well as the theories of language and language acquisition on which they are based. As such, it takes a traditional and incidental approach to the development of TLA, meaning that it is assumed that teachers will develop TLA as a result of participation in the course. Therefore, this course will subsequently be referred to as the "incidental course," and the study participants enrolled in this course will be considered members of the "incidental group."

In terms of the domains of TLA, the incidental course requires a certain level of language proficiency and appropriate social/pragmatic norms but does not provide

avenues for students to develop these explicitly—aspects of the User Domain. Other aspects of the User Domain, including sensitivity toward linguistic imperialism, the context of the L2 learner, awareness of varieties of English, and repair/reform strategies are discussed, but all within the context of designing activities and materials appropriate for ELLs. As such, the Teacher Domain is the most heavily stressed component of TLA in this course, wherein course activities include developing practical strategies for content area teachers, differentiating curriculum for various learners, and multiple assessment procedures. Student projects for credit in the course include the creation of a strategy portfolio and lesson plans, along with critiqued peer teaching. These activities and projects highlight the characteristics of the Teacher Domain, such as pedagogical content knowledge, general pedagogical knowledge, knowledge of L2 theory, and awareness of the levels of ELL interlanguage. Other characteristics of TLA, particularly those related to the Analyst Domain—knowledge about language, knowledge about the linguistic subfields, development of metalinguistic awareness, and ability to solve language problems, are not deliberately developed in this course. They may, however, emerge relative to the teaching-related tasks in the course, but they are not a predetermined focus of the course—hence the determination of the course as the more incidental approach to TLA. Students in the course are required to complete a 15-hour field experience in a public school setting.

Developing TLA deliberately. Another course in the teacher education program is also a semester-long course that most students take in the third year of their teacher education program, prior to the final year of courses in their teacher education cohorts and semester or year-long student teaching experiences. However, this particular course

focuses on the deliberate development of teacher language awareness and attempts to show teachers how their TLA affects their pedagogical practice. As such, this course will subsequently be referred to as the deliberate course, and the study participants enrolled in this course will be considered members of the experimental group.

With regard to the User Domain, like the incidental course, this course requires a certain level of language proficiency and appropriate social/pragmatic norms but does provide avenues for students to develop User Domain skills deliberately, particularly as these skills relate to sensitivity toward linguistic imperialism, the context of the L2 learner, and awareness of varieties of English. In terms of the Analyst Domain, the course proposes a model for teaching in which TLA is seen as a subcomponent of content knowledge and pedagogical content knowledge; hence, this course focuses on the requisite knowledge about language needed to effectively teach language learners in U.S. K12 public school contexts. Other components of the Analyst Domain specifically addressed include specific attention to the six subsystems of language —phonetics, phonology, morphology, orthography, syntax, and text structures. Another component of the Analyst Domain--the ability to solve linguistic problems--is explicitly addressed as students are given opportunities to apply concepts presented in each of the domains through problem solving tasks. Participants in the deliberate course are also required to solve problems and create instructional materials that require them to demonstrate their skills in the teacher Domain. Students in the course are also required to complete a 15-hour field experience in a public school setting.

Controlling for the instructor variable. It is possible that the efficacy of the instructor of either the incidental or the deliberate course might play a role in students'

degree of and attitude toward TLA. Therefore, in order to ensure that the instructors employed similar methodology, both instructors were observed two times during the semester using a rubric comprised of general pedagogical techniques appropriate for the university-level setting (Svinicki & McKeachie, 2011; Appendix E). The constructs and criteria entailed in the rubric derived from the literature on effective L2 teaching methods as well, particularly those recently embodied by the Cognitive Academic Language Learning Approach (CALLA; Chamot, 2005) or the Sheltered Instruction Observation Protocol (SIOP; Echevarria, Vogt, & Short, 2012). These two models were chosen due to their widespread use in K-12 public schools and their focus on content-language integration frameworks. These L2 teaching methods were also considered because a main goal of both the incidental and deliberate classes was for the course instructor to model the strategies that she would encourage teachers to use with ELLs. The observers both held PhD degrees in Linguistics and specialized in aspects of L2 pedagogy. According to the data produced by the observation rubric, the observers noted the exact same components on behalf of both course instructors during the instructional time period (12 out of 12). As such, the researcher accepted this as evidence that the two instructors were employing highly similar methods, albeit with different course content.

To answer the second research question, "How does the degree of TLA change over time between preservice teachers who have completed an L2 methods course with incidental instruction about TLA, and those who have completed an L2 methods course with deliberate instruction about TLA?", participants in both incidental and deliberate groups completed the same Analyst Domain and Teacher Domain tasks at the end of the semester.

To answer the third research question, "What are the attitudes, perceptions, and experiences that underpin the degree of TLA held by preservice K-12 teachers both before and after incidental and deliberate approaches to TLA development?", the researcher conducted focus-group interviews with voluntary participants, as well as collected written reflections.

Sampling for interviews. Because the principal objective of the study was to obtain data providing information on the degree of TLA in a typical group of preservice K-12 teachers, the first type of sampling procedure used for qualitative interviews and reflections was typical case sampling, which Miles and Huberman (1984) define as the selection of participants because they exemplify or highlight what is normal or average. Convenience sampling (Miles & Huberman, 1984), wherein the researcher had to also select participants on the basis of their availability to be interviewed for the study, was also used in order to create focus groups of three participants from each group, for a total of six interviewees.

Data Analyses

The quantitative and qualitative analyses employed during the present study are outlined below.

Quantitative Analyses

The quantitative analyses that were employed were fourfold. First, in analyzing the questionnaire, descriptive statistics were utilized to illustrate characteristics of the participant demographic based on the questionnaire responses. Second, descriptive

statistics were used to calculate and report the pretest mean scores on the Analyst and Teacher Domain tasks of the incidental group and the deliberate group. These descriptive statistics served to partially answer research Question #1: What is the baseline of TLA held by preservice mainstream teachers enrolled in two university-level courses designed to develop effective skills for working with English language learners?

To answer the second research question, which seeks to compare the pre- and posttest scores of deliberate and incidental groups on the Analyst and Teacher Domain tasks, an analysis of covariance (ANCOVA) was initially planned. However, five assumptions are associated with ANCOVA: measurement of the covariate, reliability of the covariate, correlations among the covariates, linearity, and homogeneity of regression slopes (Pallant, 2005). In testing the assumptions for ANCOVA before beginning the statistical analyses on the data in the present study, I found that the assumption of linearity was violated, meaning that a linear relationship did not exist between the dependent variable (posttest scores) and the covariates (pretest scores), likely because some of the posttest scores were in fact lower than the pretest scores. As such, the researcher opted to conduct a single mixed analysis of variance (ANOVA) with one between-subjects factor (deliberate or incidental group membership) and two within-subjects factors (test time and test type).

Qualitative Analyses

While the quantitative analyses lent insight into the participants' degree of TLA before and after incidental and deliberate coursework, underlying participants' performance on the Analyst and Teacher Domain tasks was their unique perspective on

TLA and how it relates to their specific experience. Therefore, in order to answer the third research question about participants' attitudes, perceptions, and experiences, as well as to provide depth of understanding to the first two research questions, qualitative data were collected and analyzed.

Marshall and Rossman (2006) assert several *criteria of soundness* for conducting qualitative research and ultimately evaluating the trustworthiness of the qualitative research study (p. 200). These criteria include credibility/believability, transferability, dependability, and confirmability. The goal of the first criterion, credibility/believability, is to show that the topic of inquiry in the study was appropriately identified and described, which may be done by establishing boundaries and parameters of both the participants and the setting (Marshall & Rossman, 2006). To meet these criteria for qualitative research, I began by conducting a pilot study on TLA with another group of preservice L2 teachers, who exhibited some difficulties with TLA in much the same manner as other participants from studies outlined in Chapter 2. This consistency inspired me to conduct the current study in the context of preservice mainstream educators and aided in the original identification of the research questions. Second, the current study draws from the methodology of previous studies that were sound in design and whose results were corroborated, specifically those detailed in Andrews (2007) and Bigelow and Ranney (2005). Also contributing to the extended description of TLA with the participants was the use of an extended period of time, in this case, an entire college semester, which lasted approximately 3.5 months. Finally, as mentioned above, I employed varied sampling methods when making decisions about which participants to include in the semistructured interview process—typical case sampling and convenience

sampling, which helped ensure that the participants were representative of a larger population of preservice K-12 mainstream teachers.

The second criterion--transferability to other settings, treatments, or populations--was addressed via the triangulation of data sources. The principle data sources included the nominal data obtained from the Analyst and Teacher Domain tasks, the written reflections, and the spoken/recorded data from the semi-structured focus group interviews. By triangulating the data in this manner, the concept of TLA was examined from multiple points, which strengthened the study's usefulness in other settings (Marshall & Rossman, 2006). I also strove to provide accurate and complete information about myself as an instrument of research, along with as much information as I was able about the participants, the context of the study, and the methodology I employed—all factors which could have ultimately affected interpretation of the data. Thus, in providing this information, other researchers may make their own determinations about how the conclusions derived from the proposed study may be transferable to other contexts.

Dependability, which helps account for the potential changes that can occur in the conditions under which research is conducted, was addressed by keeping detailed records of the study, including how data were obtained, when and by whom data were rated, and the conditions under which the interviews were conducted. Secondly, I incorporated a measure of inter-rater reliability, as mentioned above, via percentage agreements. Preliminary coding sessions were conducted between the selected raters and myself with sample data, which, on the Analyst Domain task, helped train the raters in using the answer keys and recording their results, and on the Teacher Domain task, helped train the

raters in identifying and classifying the data according to the established categories of academic language.

Confirmability, or the researcher's degree of objectivity regarding the research study, is the fourth criterion of soundness. As mentioned above in the section on the Researcher's orientation to the current study, I acknowledge my own role as an instrument and a participant in the research, or someone who has what Marshall and Rossman deem a "high level of personal interest" (2006, p. 74). As a former K-12 educator myself, I may have high degrees of empathy for the participants, which could have helped me interpret findings relative to their reality. Also, in my combined role as a course instructor and a researcher in this field, I might have possessed insight that assisted me in describing the complexity of TLA as it relates to the proposed study. Still, I took measures to mitigate potential bias that might have emerged due to my high level of interest in the study. First, employing raters other than myself to rate the Analyst and Teacher Domain tasks lessened the chance that I might have misinterpreted data, as did conducting the preliminary coding training sessions and the inter-rater reliability checks. Other safeguards to protect from interference of my own interest in the research included the use of video taping focus-group interviews in addition to taking field notes during the same interview, so that I could double-check comments that I wrote down, as well as review what actually happened at a later date. Recording focus-group interviews with a Flip camera, and then analyzing them using iMovie allowed by to review the footage and be sure of precise wording on behalf of the participants, rather than just my own perception of what was said. I also closely examined data that did not support my

conclusions, and addressed possible interpretations of that data in the discussion section of this dissertation.

Now that the value and logic of the qualitative section of the study have been articulated following Marshall and Rossman's criteria for soundness (2006), I detail the specific qualitative methods that I employed for data analyses. On the Teacher Domain task wherein participants identify language demands, inductive analysis and constant comparison were used to note which categories of language demands emerged from the participants' prose (Drew, Hardman, & Hosp, 2008; Hatch 2002). In comparing the responses between the two groups of participants (the incidental and deliberate groups) on the Teacher Domain task, an adaptation of the constant comparative method was used. This method is grounded in the notion that potential categories of meaning emerge from the data, both new and previous, which is then analyzed to determine the validity of those categories (Hatch, 2002). I use the term *adaptation* because I have many opportunities for constant comparison in the new data and few such opportunities using previous data because of the scarcity of research studies in this area. I drew on data from previous studies whenever it was feasible.

Finally, the focus-group interviews were analyzed using an adapted constant comparison method to arrive at support for the attitudes, perceptions, and experiences that influenced participants' degrees of TLA. I also used the constant comparative method to examine data between the two groups of participants, wherein I examined a particular incident from an interview or reflection document, and compared it with another incident in the same set of data. These comparisons lead to categories that I could

further compare to each other, as well as to previously existing categories (Patton, 2002, p. 159).

To summarize, the preceding chapter detailed the methodology of the current research study, beginning with my own orientation as the researcher. Operating from the constructivist paradigm, I employed a mixed-methods design so that I could expound upon the results of the numerical data analyses while accounting for the participants' perceptions of the reality they are experiencing as mainstream educators learning to work with L2 learners. With this in mind, I also detailed the specific context of the study and the participants, as the urban setting and the high degree of linguistic diversity in the immediate community of school-age children assuredly influenced the aforementioned perceptions on behalf of the participants. The five means of instrumentation—the questionnaire, the written reflection prompts, the Analyst Domain task, the Teacher Domain task, and the interview questions--were also described, along with the procedures for implementing each. The courses for developing TLA both deliberately and incidentally were also outlined. Quantitative analyses in the form of both descriptive statistic analysis and analysis of variance allowed me to determine whether any significant interactions existed between the two groups, the two test types, and the two test times. Finally, the qualitative methods of inductive analysis and constant comparison were described, following my explication of how four criteria of soundness for qualitative research—credibility, transferability, dependability, and confirmability—were met as the study methods were executed.

Table 3.1

Participant Backgrounds

	Incidental Approach to TLA Group	Deliberate Approach to TLA Group
	Year in Undergraduate	University Program
Freshman	0	0
Sophomore	1	4
Junior	25	17
Senior	32	37
	Gender	
Male	10	11
Female	48	47
Other	0	0
	Grade Range	Planned to Teach
Early Childhood	2	5
Elementary (K-6)	57	20
Secondary	2	30
Special Education	2	2
ESL	0	0
EFL	5	1
Other	1	0
Not Reported	0	0
	If Secondary Specialist,	Content Area Planned to Teach
Language Arts	1	8
Math	0	2
Science	0	2
Social Studies	1	17
Fine/Performing Arts	1	2
Physical Education	0	2
Vocational	0	1
World Languages (other than English)	0	5
Not Reported	55	0

Table 3.1 (continued)

Participant Backgrounds

	Incidental Approach to TLA Group	Deliberate Approach to TLA Group
	Endorsement or Certificate	Planned to Obtain
ESL Endorsement	34	37
TESOL Certificate	4	2
Neither	17	16
Not Reported	3	3
	Courses in Which	Currently Enrolled
Introduction to Linguistics	1	1
Educational Linguistics	5	0
Content-Based Instruction	1	5
Educating ELLs	58	0
Teacher Language Awareness	0	58
Intro to Multicultural Education	3	9
Assessment of Diverse Populations	16	1
School-Family Partnerships	2	6
Not Reported	1	1

Table 3.1 (continued)

Participant Backgrounds

	Incidental Approach to TLA Group	Deliberate Approach to TLA Group
	Courses Completed Prior to Semester of Data Collection	
Introduction to Linguistics	26	6
Educational Linguistics	24	0
Content-Based Instruction	0	4
Teacher Language Awareness	3	0
Intro to Multicultural Education	48	28
Assessment of Diverse Populations	4	0
School-Family Partnerships	5	18
Home, School & Community Relations	52	0
Not Reported	2	19
	Previous Teaching Experience (Age Ranges)	
0-4 years old	6	4
5-11 years old	12	9
12-18 years old	5	4
Adults	1	3
No previous Experience	33	36
Not reported	1	0

Table 3.1 (continued)

Participant Backgrounds

	Incidental Approach to TLA Group	Deliberate Approach to TLA Group
	Previous Teaching	Experience (Contexts)
Adult EFL	0	4
Art	3	1
Bilingual Volunteer	0	1
Church	2	1
Dance	0	1
High School Math	0	1
Preschool	6	4
Reading	0	2
Special Education	0	2
K-12 Substitute	5	0
Teacher's Aide	5	1
Tutoring/After School	8	2
	Studied a Language	Other than English
Yes	43	43
No	13	15
Not Reported	2	0
	Languages other than	English Studied
American Sign Language	2	2
Arabic	0	1
French	9	8
German	2	3
Greek	1	0
Japanese	2	0
Italian	0	2
Latin	0	2
Norwegian	1	0
Russian	1	0
Spanish	40	32
Swedish	0	1

Table 3.1 (continued)

Participant Backgrounds

	Incidental Approach to TLA Group	Deliberate Approach to TLA Group
	Average Time of Language Study	
Years	2.57	4.6
	Self-Reported Level of Proficiency in Language(s) Other Than English	
Limited/Beginning	37	31
Intermediate	6	6
Advanced	2	2
Fluent	0	5
Not Reported	20	7
	Average Time Spent in a Non-Anglophone Country	
Years	2.07	1.28
	Languages Other Than English Spoken in the Home Environment	
American Sign Language	1	0
French	1	0
German	0	1
Navajo	0	1
Scottish	1	0
Spanish	1	5

Table 3.2

Focus Group Interview Questions

Question: How did [the deliberate or incidental course] help you…	Domain
Develop knowledge about ELLs and their experiences?	Teacher
Develop knowledge about which strategies to use in a classroom with ELLs?	Teacher
Become aware of the different levels of language proficiency that ELLs might possess?	Teacher
Recognize what parts of text or lessons might be demanding for ELLs?	Teacher
Learn more about issues in education (such as assessment, cultural differences, etc.) facing ELLs?	Teacher
Learn more about English grammar?	Analyst
Learn more about language overall?	Analyst
Understand the linguistic subfields, such as syntax, pragmatics, semantics, etc.?	Analyst
Reflect on your own language use/ability?	Analyst
Solve problems relative to language?	Analyst
Learn more about L2 acquisition theory?	Analyst & Teacher

CHAPTER 4

RESULTS

Chapter 4 presents the results of the quantitative and the qualitative analyses of participants' responses to both written tasks and focus-group interview questions in hopes of providing additional insight into U.S. Kindergarten through Grade 12 (K-12) preservice teachers' degree of teacher language awareness (TLA). To review, the three goals of the current study were 1) to establish a descriptive baseline for the degree of TLA possessed by K-12 preservice teachers, 2) to determine if the posttest scores of the group exposed to a deliberate approach to TLA development would differ from those who were exposed to an incidental approach to TLA development in the Analyst and Teacher Domains, and 3) to determine what attitudes, perceptions, and experiences underpinned the degree of TLA held by preservice K-12 teachers both before and after incidental and deliberate approaches to TLA development. This chapter presents the results of the study in terms of which of the research questions they answer.

Establishing a Descriptive Baseline of TLA

The first research question asked, "What is the baseline of TLA held by preservice mainstream teachers enrolled in two university-level courses designed to

develop effective skills for working with English language learners?" Three key data sources provide insight into the answer to this question. First, participants completed a written reflection wherein they reflected on why they thought a course highlighting TLA would be required by the university for teachers who are seeking licensure in K-12 public schools. Second, they completed the pretest Analyst and Teacher Domain tasks. Third, they were also asked to reflect in writing about their reactions to the pretest tasks. The combination of the numerical mean scores combined with the two qualitative components provides insight into participants' awareness of the construct of TLA itself, as well as their attitudes toward the pretest tasks that operationalize TLA.

Awareness of TLA

The course instructors asked the participants to respond to the following question on their first day of class: "Why do you believe this class on teacher language awareness is required by the [teacher education program]?"

Based upon their responses, it became evident that even though their background knowledge varied somewhat, most participants did not know what TLA entailed. The categories that emerged from analysis of their writing samples illustrate cognizance of the situation of ELLs in the current public school milieu--the presence of language differences, the growing ELL population demographic, cultural/linguistic diversity, and the pedagogical skill set that a teacher working with ELLs would need—all of which are part of the Teacher Domain of TLA. Still, many reflections lacked specific information about language and the development of language awareness, which are associated with the Analyst Domain. Other reflections failed to connect TLA development with the

education of ELLs, and instead referred to general communication or grammar skills that teachers may need or to topics that teachers are legally allowed to discuss in schools (e.g., sensitive topics that might offend students of diverse cultural or ethnic backgrounds, or topics that might be morally sensitive). Participants' responses by category are presented in Table 4.1.

Pretest Scores on the Analyst and Teacher Domain Tasks

After completing the written reflection, the Analyst and Teacher Domain pretest tasks were administered to the participants. Mean scores were calculated and revealed to be relatively low in both the Analyst and Teacher Domains. Out of 20 possible correct answers on the Analyst Domain task, the mean score of the incidental group participants was 1.724 correct, and the mean score of the deliberate group participants was 1.948. Essentially, this indicates that participants were able to identify fewer than 10% of the grammar and conventions items on the Analyst Domain task at the pretest time. These results are seen in Table 4.2.

Out of 10 possible categories of language demand on the Teacher Domain task, the mean score of the incidental group participants was 1.983 correct, and the mean score of the deliberate group participants was 1.552. Essentially, this indicates that participants were able to identify fewer than 20% of the language demands present in the Teacher Domain task at the pretest time. These results are seen in Table 4.3. The low mean scores on both of the pretest tasks in Analyst and Teacher Domains are further evidence supporting the conclusion that the TLA of the participants in the study at pretest was low.

Attitudes Toward Teacher Language Awareness Tasks

In order to see if the previously described Analyst and Teacher Domain pretest tasks had impacted the participants in any way, participants were asked to reflect in writing after they completed them. The reflection prompt consisted of two inquiries: "How did you feel as you did each task," and "Were you surprised in any way about your level of language/grammar knowledge?"

In response to the first prompt, a similar theme with two aspects emerged: frustration at having forgotten knowledge about language and frustration at never having learned the knowledge itself. With regard to frustration at having forgotten knowledge, one participant remarked, "I felt bad because I couldn't remember what the words meant. I knew I had seen them before but couldn't connect them." Another participant made a similar comment, with "I didn't feel good about it because I forgot what these words meant. I felt like a failure b/c I couldn't complete the assignment." Yet another preservice teacher commented on having learned them before but felt unable to apply that knowledge within the context of the task: "I felt frustrated because I knew a lot of the items, but it was hard for me to find examples. A lot of the terms I have heard before, I just don't know an example."

Out of those who commented that they did not possess the knowledge required of them by the tasks, many utilized terms such as, "surprised," "helpless," and "hopeless," in addition to "frustrated." One participant said, "I did not know many of the grammar terms whatsoever, and I was actually surprised I didn't. Another confessed, "I felt a little frustrated because I did not know many of them. I also felt a little embarrassed." Along the line of helplessness, one preservice teacher commented, "I felt helpless because I

didn't know a lot of the things they were asking," while another noted her disappointment: "I felt let down when trying to do this assignment because all of these felt like something I should know and didn't."

Several participants noted that they felt the tasks were a reflection on their intellect, and thus expressed shame and employed pejorative terms to describe their perceived lack of knowledge. Some examples reflecting intellect included: "I felt not very smart <smiley face>," and "I felt like a moron and that I should probably take a class on these." Others verbalized shame in terms of their lack of knowledge by saying, "For most of the [tasks], I felt ashamed because I should know this stuff," whereas some participants were more emphatic about their feelings toward the tasks. One example came from a participant who remarked, "How do you feel about each task?' Honestly… Horrible! I don't know what these things are! I feel so stupid!" An additional participant incorporated the term, "stupid," along with, "I felt horrible, stupid and incompetent. Even with learning another language fairly well, or at least the grammatical elements, this task was incredibly challenging, full of new words. For the most part it was all hard minus a few things I learned in Spanish courses."

In response to the second part of the prompt, "Were you surprised in any way about your level of language/grammar knowledge," almost all participants who responded noted surprise at their inability to complete the majority of the tasks. As above, some commented that they were surprised because they had learned the information at some point and had forgotten it, as in these example citing both high school and college experience: "I was surprised that I had forgotten so much of what I had learned in high school," "I was surprised [at my performance]…it really hasn't been that long since my

last English class," and, "I was surprised because I have taken a linguistics class, yet I could not answer the majority of the questions." Others commented that via the task, they became aware that they did not possess as much knowledge as they thought they did, as with this participant: "I thought I knew more concerning grammar, but I learned that (I) did not know hardly any of the terms." Another wrote, "I knew that my knowledge about grammar is not what it should be," while similar comments included, "Sorry! I guess I have a lot to learn," "I didn't realize how little I knew," "I didn't think my language/grammar knowledge was that bad," and, "I thought I knew more. I thought this would be easier for me." One participant noted utter unfamiliarity with many of the constructs on the tasks: "I am completely surprised, [by my level of knowledge], as some of these things I have never heard before, and most I could not answer."

The misconception that being a native speaker of a language equates with possessing knowledge about that language was also present, as in this comment: "I was a little surprised because I am a fluent English speaker. It is my first and only language. I have been taught grammar my whole life. So I was a little surprised I only knew two out of nineteen." Other comments included reflections on their qualifications, such as this remark: "I was very surprised [about my performance]. It's actually kind of scary." The above participant reflections are the third piece of data that corroborate the notion that not only was their TLA low, their self-confidence in terms of their TLA was also low.

Examining Variance in TLA Over Time

The second research question of the present study was, "How does the degree of TLA change between mainstream K-12 PSTs who have completed an L2 methods course with incidental instruction about TLA, and those who have completed an L2 methods course with deliberate instruction about TLA?" To answer this question, a single mixed analysis of variance (ANOVA) with one between-subjects factor and two within-subjects factors was employed with the participants' test score as the dependent variable, the test time (pre- or post) and the test type (Analyst or Teacher) as the within-subjects variables, and the group type (incidental or deliberate) as the between-subjects variable. All main effects were significant, as seen here: Test Time [F(1,114)=15.888] with a moderate to large effect size (partial Eta squared=.122), Test Type [F(1,114)=18.286] with a large effect size (partial Eta squared=.138), and Group: [F(1,114)=7.275] with a moderate effect size (partial Eta squared=.060; Pallant, 2005). All two-way interactions were also significant: Test Time and Group [F (1,114)=19.059], Test Type and Group [F (1,114)=39.490], and Test Time and Test Type [F (1,114)=15.339], with large effect sizes (partial eta squared=.143, .257, and .119, respectively). The three-way interaction was also significant: Time, Type, and Group [F (1,114)=13.536] with a large effect size (partial eta squared = .106). Following up on the significant main effects and interactions, the data were split by Analyst and Teacher Domain; each is discussed separately below.

Analyst Domain Task Results

For the Analyst Domain, a two-way ANOVA was conducted to investigate the relationship of group membership (two levels: incidental and deliberate) by test time (two levels: pre and post). This was found to be significant [F (1,114)=20.799] with a large effect size (partial eta squared = .154). Therefore, two one-way ANOVAs were conducted to investigate the difference between the incidental group's Analyst Domain mean test scores, and the deliberate group's Analyst Domain mean test scores. No significant effect was found on the incidental group pre- and posttest scores [F(1,114)=.005; p=.942], but there was a significant effect between the pre- and posttest scores for the deliberate group [F(1,114)=31.973; p<.005; partial Eta squared=.359]. The mean scores and their standard deviations are presented in Table 4.4. A visual representation of the mean scores of both groups can be seen in Figure 4.1.

Grammar/Conventions structures identified. To further evaluate the Analyst Domain task, the individual grammatical and conventional structures that participants identified were tallied at posttest. As mentioned above, the deliberate group was able to identify more of the grammar and conventions items from a content-area text. The structure that deliberate group participants identified correctly the most often was a direct quotation (57 participants), followed by a prepositional phrase (32 participants), and an indirect quotation (29 participants). From there, numbers of correct identification dropped to only 19 identifications of a present progressive verb tense, and 12 identifications of a present perfect and past progressive verb tense (tied). All other structures were identified correctly by 10 participants or fewer. The incidental group's numbers of correct identifications of structures were lower, but paralleled the same structures that the

deliberate group identified the most often. The structure that incidental group participants identified correctly at posttest was, like the deliberate group, a direct quotation (40 participants). This was followed by an indirect quotation (23 participants), and a prepositional phrase (15 participants). However, unlike the deliberate group, the incidental group participants were unable to identify much more than those three; the number of correct identifications of all other structures was at ten or below. This contrast is visible in Figure 4.2.

Teacher Domain Task Results

For the Teacher Domain, a two-way ANOVA was conducted to investigate the relationship of group membership by test time (two levels: pre and post). This was not found to be significant [F (1,114)=.826; partial eta squared = .007)]. Two one-way ANOVA were conducted to investigate the difference between the incidental group's Teacher Domain mean test scores, and the deliberate group's Teacher Domain mean test scores. No significant effect was found on the incidental group pre- and posttest scores [F(1,114)=.226; p=..637], nor was there a significant effect between the pre- and posttest scores for the deliberate group Deliberate Group: [F(1,114)=.649; p=.424]. The mean scores and their standard deviations are presented in Table 4.5. A visual representation of the mean scores of both groups can be seen in Figure 4.3.

Language demands identified. To further analyze the Teacher Domain task, the individual language demands that participants identified were counted. As indicated by the mean scores in Table 4.5, participants in both groups identified, on average, two out of ten possible language demands. The two that were most identified by participants in

the incidental group on pretests were content-obligatory vocabulary (45 mentions) and background knowledge (48 mentions); these were also the two most often-identified on the posttest measure, with 34 identifying content-obligatory vocabulary and 36 identifying background knowledge. For participants in the deliberate group, they too identified content-obligatory vocabulary (43 mentions) and background knowledge on the pretest (19 mentions). Yet, on the posttest measure of the deliberate group, content-obligatory vocabulary was still the most often-identified (34 mentions), but instead of background knowledge (10 mentions), participants in the deliberate group identified grammar the second most often (12 mentions). Functional language was the least-identified language demand, with only two participants in the deliberate group identifying it on the pretest, and only one participant in the deliberate group identifying it on the posttest. No one in the incidental group identified functional language on either measure. A complete breakdown of the language demands identified by both groups on pre- and posttest measures is presented in Figure 4.4.

Following are the complete data tallies for each of the language demands identified by group (incidental and deliberate) and by test time (pre- and post-).

Vocabulary. For analysis purposes, this category of language demand was divided into mentions of content-compatible and content-obligatory vocabulary (Short, 1997), or simply general mentions of vocabulary. Content-compatible terms were defined as terms that are academic in nature, but may appear in other content areas or be used for other purposes, while content-obligatory vocabulary was defined as those terms that **must** be understood in order to grasp the full meaning of the lesson or text. Participants from

both groups identified content-obligatory vocabulary most often on both the pre- and posttest measures, as seen in Table 4.6.

This result is logical, as these key words and technical terms are subject-specific and of low frequency (Carlo, et al., 2004; Echevarria, Vogt, & Short, 2012); thus, they are the words that ELLs are least likely to know. Very few participants (three from the incidental group and 18 from the deliberate group) identified content-compatible vocabulary on the pretest measure, and neither group improved on the posttest.

Word study. As a sort of subsidiary to vocabulary, word study, defined as the process of analyzing words outside of their context for components, such as prefixes, suffixes, affixes, pronunciation, etc., was mentioned by one single participant out of 116 on the pretest measure, and only by 13 on the posttest measure, as seen in Table 4.7.

Background knowledge. For purposes of this research, background knowledge included any demands that would be placed upon students' topic awareness, the context in which the text was found or that the text provided, any prior learning that the students may have had, and any cultural knowledge that would aid the students in comprehending the text. Participants overwhelmingly identified background knowledge as a potential language demand for ELLs, as can be seen in Table 4.8.

Grammar and conventions. Participant mentions of grammar could have included topics such as subject-verb agreement; verb Tense, aspect, or mood; Articles; Syntax (complex v. simple); parts of speech; clauses, etc. Conventions could have included mentions of capitalization rules, paragraphing, spelling, quotation format, etc. The number of times these were identified by participants is visible in Table 4.9.

Reading strategies and difficulty of the text. Reading strategies could have included participant mentions of noticing any parts of the text structure, such as headings, captions, pictures, etc., or actual strategies such as Skimming/scanning for information, predicting, asking/answering questions, Bold/underline key terms or concepts, etc. Text difficulty could have included any comments about the reading level of the text relative to the level of the ELLs in the class. Participant mentions of this category of language demand are seen in Table 4.10.

Functional language. Functional language includes terms that are not content-specific but perform a certain language function (Schleppegrell, 2007), such as sharing information, organizing information, being humorous, or communicating personal belief, e.g., transitions such as first, second, third, last; phrasal language such as "I believe, I think…," etc. Numbers of mentions of functional language are detailed in Table 4.11.

Reflecting on Teacher Language Awareness Experiences

The third research question in the current study was, "What are the attitudes, perceptions, and experiences that underpin the degree of TLA held by preservice K-12 teachers both before and after incidental and deliberate approaches to TLA development?" To supplement the quantitative data, focus group interviews were conducted with voluntary participants from the incidental and deliberate groups. Their responses and subsequent connections to the existing literature are presented below.

The User Domain

The main theme that emerged from comments relative to the User Domain was that of overall awareness of language (Andrews, 2007). From the deliberate group, this comment came: "I now notice speech more as well as pronunciation. I learned about how to express myself better and use my language to its full advantages," while a similar comment came from the incidental group: "After this class, I realized how important it is to speak clearly and to think through my lessons…We had to present our lesson plans so I observed examples and non examples of how to help ELL students." As described in Figure 2.1 from Chapter 2, part of the User Domain also includes awareness of linguistic imperialism and language varieties. One participant in the deliberate group mentioned this: "I think [the deliberate] class can throw out a lot of prejudices and stereotypes to have us look at and help realize things that we need to be aware of." Another participant from the incidental group noted that the noticing of language use helped her focus on improvement: "[The incidental course] made me realize that my own language use and ability skills can always be improved." She also commented that noticing her language user, "…made me realize how truly difficult the English language is to learn and to understand and made me more empathetic and understanding towards my ELL students," a direct connection between the User Domain (noticing language use) and the Teacher Domain (maintaining empathy toward ELLs).

The Analyst Domain

Themes that emerged from the interview questions derived from the Analyst Domain were similar to those that emerged from the initial reflections about what TLA is

and the teacher's ability in terms of KAL.

Defining TLA. In terms of the first theme, awareness of TLA itself, responses ranged from ambiguous or partially correct responses to a rather complete definition of TLA. Those on the ambiguous end of the spectrum identified TLA as the teacher's responsibility to be aware of the language s/he uses in the classroom, or the responsibility to be aware of students' proficiency levels. For example, an interviewee from the deliberate course said that TLA is…"the teacher being aware of the language needs of the kids in the room. Whether they are ELLs, ESL, etc." An interviewee from the deliberate group focused more on the different layers inherent in language, but did not specify what those may be: "TLA is…the importance for teachers to understand the natural progression of language development for students and the critical knowledge of the aspects of language in order to better instruct their ELL students." Another participant from the incidental group recognized the User Domain and the Teacher Domain in TLA, but failed to note the Analyst Domain: "To me, teacher language awareness is being aware of what languages my diverse students speak and most importantly the way my diverse students learn….[B]eing aware of these different aspects about my students will help me to improve and differentiate my instruction, which will improve their knowledge and ability to learn.

Attitudes toward KAL. The second theme extricated from the interview data was the teachers' attitudes toward their ability in terms of KAL, specifically, grammar. Participants still retained a fairly negative view of their own abilities with regard to English grammar, but cited the deliberate approach course as being helpful. An deliberate course participant lamented, "I suck at English and grammar," but added, "This class was

a good refresher and a good skill builder for me in how I spell and use grammar." Another deliberate course participant specifically cited verb tenses: "I knew very little about the specifics of tenses in English past the past, present and future tenses. [The deliberate course] instructed me about the more complex tenses." The participants from the incidental course remarked that they did not feel like their grammar improved specifically during the course, but that rubric requirements on assignments and presentations reminded them to double-check their own grammar on performance-based assessments. This, however, is actually more a component of the User Domain than the Analyst Domain. Two members of the incidental focus group connected grammar knowledge with previous coursework, but not with the incidental course. In doing so, one of them commented that she "did feel that [Educational Linguistics] was an unnecessary class to take for elementary school teachers. While [Educational Linguistics] was an interesting class that I enjoyed, I do not feel like it helped me to understand or better prepare me to be more effective with ELLs."

With regard to other components of KAL, participants from both groups were very positive about how much they learned about language overall. Participants from the deliberate group incorporated very specific terms: "I learned TONS about the English language and how it works. I think that is a huge help in understanding English and then being able to help students better understand it. With phonemics and morphemes and graphemes, I learned a ton about what I need to focus on to help ELLs," while another deliberate course participant commented on cross-linguistic relationships: "By learning more about the IPA and the general constructs of language, such as sentence structures or use of masculine/feminine articles, etc. the relationship between multiple languages

became clearer." Two of the participants from the incidental group did not feel their knowledge of language overall improved notably, but one asserted that the course "helped me to be a more effective educator in literacy skills. Improving my literacy skills will also help me to better integrate them into other content areas which will help my ELL students to better understand the content area and to better understand the English language."

When asked if the courses had helped them understand the linguistic subfields, such as syntax, pragmatics, semantics, participants from both groups commented that these categories were not covered at all or "as much" as other topics. As there is a limit to how much a semester-long course can cover, the participants' comments reflect the prioritizing that university-level instructors must do in order to teach the most critical aspects of the class topic. Even with as much time as was spent on basic phonetics, phonology, morphology, and syntax during the deliberate course on TLA, participants' mean scores barely improved. Covering pragmatics and semantics in that course would likely spread the instructor even more thinly in terms of covering topics with any sort of depth. It was telling that the participants from the deliberate group included syntax in the linguistic subfields that they did not learn much about, as, according to the deliberate TLA course instructor, six 3-hour class periods were devoted to syntax during the semester. This may indicate that, although the preservice teachers were exposed to that linguistic sub-field, they were not able to connect the information or internalize it in a way meaningful to them.

L2 acquisition theory. Participants also conveyed positive experiences with L2 acquisition theory, and one commented that it as the first time in her elementary

education program where she learned about L2 acquisition theory. She maintained that it was a predominant focus of her class. "[The incidental course] was the first time in my elementary education program where I actually learned about L2 acquisition and the theories behind it. It was explained in full and was a main focus." Another participant cited being able to compare L1 and L2 acquisition, and how that helped her develop empathy for ELLs, as well. "[The deliberate course] talked about the difference between first and second language acquisition. It discussed how we can absorb our first language but must struggle to learn the second." One deliberate group participant commented that personal experiences as language learners or teachers were probably more effective than classroom-based theory learning: "Personal experience is probably the best way to learn more about L2 acquisition theory. We touched on it slightly in [the deliberate class], but I think that people who learn a second and third language will better understand and relate, as well as just personal experience with L2s. Watching where kids struggle and finding commonalities is something we were taught and I think that is the best way to really learn."

The Teacher Domain

Three principal topics became apparent from participants' comments about the Teacher Domain. They included empathy that they developed for ELLs as a result of their coursework, the pedagogical knowledge they gained as a result of their coursework, and knowledge of other issues relative to ELLs in public school contexts.

Empathy for ELLs. Many comments from the interview focus groups centered around increased knowledge about the ELL experience, ranging from more general

comments about what ELLs need to know in public schools, to more specific comments about experiencing some difficulty with language as an ELL might, or being aware of ELLs' English language proficiency levels. Regarding more general commentary about ELLs, a participant from the deliberate group credited the class with teaching her, "to look more at what works for kids…Using 1-on-1 methods and watching kids during work, to see their knowledge levels and get to know them more on a personal level." A participant from the incidental group commented that the incidental approach helped her develop knowledge about ELLs by "providing examples of teachers who differentiate for ELL students and by requiring the creation of lessons specifically for ELL students."

Participants from both groups appreciated the empathy that they experienced through various language experiences present in each class. "[The deliberate course] taught me to think more like a student…especially to think like an ELL. There were many instances where we had to think of ourselves as the L2's, like being in a different country, and what we would do with ourselves and what would help us learn." Another from the incidental group appreciated the "authentic environment that helped us realize what it would feel like to be an ELL student." The same participant added, "I feel confident teaching ELL students because I understand how to create an environment that is comfortable for all students to learn." Also about the incidental course, another participant said, "[The incidental course] helped me to understand and become more familiar about ELL students including where they come from, the languages they speak, what they believe in including holidays they may or may not celebrate, and their background knowledge in which they bring to my classroom." Another participant from the deliberate course remarked, "While [the deliberate course] seemed to focus more on

the technicalities of the English language than the experiences of ELLs, it did make clear how large the impact of the growing population of ELLs in school is changing the dynamics of the classroom including the experience of ELL students. It made it obvious how easy it is to take a first language for granted. While I have experience learning a second language, the process of learning English as a second language came off as being a much more difficult task."

Another aspect of the ELL experience that teachers from both groups credit the classes with helping them develop was awareness of ELLs' levels of language proficiency. Several of the participants noted that they had never before considered that there were different levels of language proficiency, and said that in previous classes, students were always referred to as either ELLs or native speakers, but they had not been taught that ELLs would be at different levels among themselves. One comment from a member of the incidental group portraying this sentiment was, "Before taking [the deliberate course], I didn't realize that there were five different levels of language proficiency…I am so glad that I learned about the various stages of language proficiency because there are different ways to differentiate for students at different levels. While studying language proficiency in [the incidental course] I learned about many of the different language standards that ELL students fall under such as the WIDA standards. By learning these standards, it is easier to identify what level each of my students is at and what types of intervention I need to provide to them." Another participant commented that she felt a discrepancy between how they were taught in the deliberate class to look at language proficiency—instead of looking at levels based on standardized language tests, she felt formative assessment was more informative. "[The professor]

taught us to look a lot at test data. I personally think that is a great tool to use, but I also know that it is important to walk by and see their work as well as listen in to assess their knowledge." This same feeling of distrust of standardized levels of proficiency was expressed by another participant in the deliberate group: "We also need to test the water in what our students know, and to not always trust the "levels" they say match up. Our students might surprise us, and we need to find out what they REALLY know rather than what they should know on 'this level.'" Another included language proficiency as part of students' backgrounds: "It made me realize how different language backgrounds might influence the strengths or weaknesses of students while learning English."

Pedagogical content knowledge. When asked about strategies and activities designed for ELLs, participants from both groups cited the courses as being beneficial in this regard. One participant from the incidental course said that one way she learned the strategies was through both the modeling and participation in the strategies. "The [incidental course] provided a new strategy every class that is beneficial for ELL students. I learned how to apply the strategies into my classroom because we were required to participate in the strategies." Participants from the deliberate group mentioned the trial-and-error process in terms of seeing which strategies might work best for students. One example of this was, "[The deliberate course] talked a lot about what will work best for students and really finding out for ourselves. I think having successful strategies can come from a lot of trial and error and seeing what kids respond best to. It taught me about having the main goal be success of the students, and finding what achieves that." Still, another participant from the deliberate group noted less of a focus on strategies for L2 learning: "I didn't feel this class prepared me with strategies but instead

focused on the IPA in extreme detail and then grammatical knowledge. There were a few games, such as word searches or matching games that could be used in a classroom." Participants from the incidental group mentioned strategies more favorably, which was expected due to strategies as a pedagogical focus of that course. One said, "[The incidental course] taught me many effective strategies to use in my classroom with ELLs…I learned how to activate background knowledge with my students, integrate literacy skills into any content area which will improve their English language skills, how to engage them in learning, and just basic strategies to make them feel comfortable, safe, have fun when learning content while practice and improving their English." Another agreed, saying, "[The incidental course] helped me solve problems relative to language just by teaching me effective language strategies to use to help ELL students understand English better." The third participant from the incidental group specifically mentioned interaction in terms of strategies: "The strategies taught provided me with the skills to get every ELL student engaged and involved in my lessons while giving them ample opportunities to practice language."

When asked about how they felt each course helped them to recognize what parts of text or lessons might be demanding for ELLs, the participants from the deliberate course said that it did not apply to their course. The incidental students mentioned that the course helped them develop this skill, but when asked to expand, they referred mostly to larger language modalities, such as reading, and speaking, rather than specific language demands of academic lessons. This was another finding that could indicate a failure of preservice teachers to connect the material to which they were exposed to the tasks they were asked to complete for credit in the courses. The summative assessments in both

courses culminated in projects (albeit different ones) that would require them to recognized what parts of text or lessons might be demanding for ELLs. One incidental participant said that, "In class, we had to present different lesson plans to the class specifically for ELLs. During the class presentations, I learned that ELL students need specific instruction that is easy for them to understand." Another referred to context and language modalities: "Visuals are a great way to help students understand. The class activities helped me understand that ELL students struggle with reading and speaking English." Another incidental participant interpreted language demands in terms of comprehensible input: "One of the main things [the incidental course] taught me was how clear and unbiased I need to be in my instruction in order to make my ELL students successful. By not including idioms and bias questions or comments in my lessons will make it so all of my students are receiving the same level of equal and equitable instruction." Only one participant identified an actual language demand during the interview, when she said, " [The incidental course] emphasized that sometimes it's not only the specific technical vocabulary of a text but also the repetitive common words that would greatly prevent understanding if there was a lack of comprehension." Another incidental group participant did, however, mention that adaptation was one way to help ELLs with language demands, but did not mention any specific demands. "If we can modify the lesson for the students, they are more willing to succeed because they won't be as frustrated."

Opinion of the courses. Overall, participants from both groups observed that they found the courses useful in various ways. From the incidental group, the participants concluded that the course was beneficial because it seemed authentic to the actual tasks

they would be doing as teachers when they entered the work force. They favored interactive activities in the course and the tasks of planning and presenting lessons created for ELLs. "This class was very beneficial because it directly related to our lives. We had to collaborate to create lessons, create our own strategy portfolios, research about various issues with differentiation and participate in class activities and discussions. This class was very interesting and I loved that every session was something different. The lesson plans were challenging but I was thankful to have a great group to bounce ideas off of." Commentary from the deliberate group tended more toward the benefits of knowing English deliberately. One participant said, "The class pointed out how difficult mastering the English language can be, and how common errors can present themselves and how frequently [ELLs'] needs aren't being met."

The preceding chapter presented the results of both quantitative and qualitative analyses on preservice teachers' degree of TLA both before and after L2 coursework that adopted two different approaches to TLA, one deliberate and one incidental. In summary, the analyses served to answer the three research questions. First, the analyses revealed that degrees of TLA among all participants were low before they participated in the L2 coursework. Three bodies of data supported this conclusion: 1) analysis of written reflections revealed that participants could not provided specific answers as to what TLA was or why it would be required to help educators work with ELLs; 2) quantitative analysis revealed that their pretest mean scores on both the Analyst and Teacher Domain tasks were low (both mean scores of both groups on both tasks were < 2); and 3) analysis of written reflections revealed that participants exhibited low self-esteem with respect to the language awareness tasks, and that they also used negative language to describe their

reaction to the tasks in the Analyst and Teacher Domains. Second, analysis of variance (ANOVA) revealed that a significant relationship existed between test time (pre or post) and deliberate group membership on the Analyst Domain of TLA, while no significant relationship existed between test time and incidental group membership. ANOVA also revealed that neither the deliberate group nor the incidental group demonstrated a significant relationship between test time (pre or post) in the Teacher Domain of TLA. Focus-group interviews were conducted with voluntary participants from both the deliberate and incidental groups in order to answer the question about the attitudes, perceptions, and experiences that influenced participants' TLA development over time. Participants' responses were analyzed and categorized according to emergent themes that included defining TLA, attitudes toward KAL, L2 acquisition theory, empathy, pedagogical content knowledge, and opinion of the course. A discussion of these results is found in the following chapter.

Table 4.1

Participant Responses to the TLA Course Requirement

Category	Number of Mentions	Examples of Participant Comments
Changing Population Demographics	16	"ELLs are a growing daily reality in our classrooms." "The dynamics of Utah, and the U.S. are changing rapidly, so…we need to be better trained in the areas of language, cultural awareness, and training." "We live in a changing society…our schools are growing more and more diverse each year." "The number of ELLs has increased and continues to increase and it is critical for teachers to get the training they need." "As Utah's population becomes more diverse, and in some ways, differentiated, language becomes an even more important access point in the complex social and educational relationship in schools." "With the increase of students who require ESL instruction as well as the overall change in all demographics, this course will aide educators in such instruction and transition." "As a teacher it is important to help the many children that are coming to this country and help them succeed and catch on to English."

Table 4.1 (continued)

Participant Responses to the TLA Course Requirement

Category	Number of Mentions	Examples of Participant Comments
Cultural and Linguistic Diversity	9	"The nation is an ever growing multicultural population…It is vital to be more aware of how language is used and perceived in the classroom." "We have an ever growing diverse populations in school and in the larger community. Language awareness helps us to become more culturally aware of how others learn the usage of language and encourage our own native language." "Utah is becoming more multicultural. Many people from all over the world are coming to Utah. They need to be taught according to the country's laws." "There is an increasing need for teaches to broaden their cultural and linguistic backgrounds." "The university is realizing how even our culture (natives) are effected by different cultures. We need to learn about each other to have balanced perspectives." "There are so many languages used in school." "Some of the classes in the Salt Lake District have students who speak many different languages."

Table 4.1 (continued)

Participant Responses to the TLA Course Requirement

Category	Number of Mentions	Examples of Participant Comments
General Communication Skills	14	"…to give future educators the skills they need to clearly & effectively use proper language in the classroom." "We, as teachers need to be fantastic communicators. This class is another step in that learning process." "…Because confidence in speech is important." "…Because students wanted to learn how to communicate better with their future students." "…Teachers need a better understanding on language. I feel the way people speak has changed over the years…going downhill—More of a 'slang' language, for example, 'texting.'" "Most of the time people aren't as good at communication and writing as they think they are. English/Grammar is fundamental but almost always skipped over unless you're an English major." "…using proper grammar." "…Because communication is a huge part of what teachers do, and there is no way to teach your content without strong communication skills." "…to improve all certain aspects of our language and communication. Communication and language are crucial in schools, so as future teachers, we have to keep developing these skills in productive ways."
General Mentions of Language	2	"As a teacher and a role model for your students, an awareness of language is critical, especially for students who are learning English as a second language."

Table 4.1 (continued)

Participant Responses to the TLA Course Requirement

Category	Number of Mentions	Examples of Participant Comments
Language "Barriers"	1	"…There are students in the public school system who either do not speak English as a first language or might otherwise have communication barriers. As teachers we need to be aware of what barriers stand in our way to have our students be understood."
Political Correctness Or Appropriateness	4	"I thought it was a filler class, one that taught teachers how to use language in a manner to help them stay 'safe' morally when teaching, and avoid confusing sentence structure or wording within the classroom." "So teachers can be appropriate with their language in the classroom…For example, if a teacher is unaware that her language offends a certain race, gender, ethnicity, etc., this can make the student feel disrespected." "Because teachers go into teaching not knowing what they can say and not say so it's important that we learn." "I thought this class might cover more of a multicultural aspect, a legal aspect, most effective ways to talk to teenagers, that sort of thing."
Teachers' Own Deficiencies or Needs	11	"Teachers need to be able to more effectively teach their diverse classrooms. I also think they saw a general unpreparedness in new teachers when it came to the actual delivery of their lessons." "…So teachers have the tools necessary to communicate with both English and non-English speaking students." "…It is important to be able to meet and understand the varying needs of all their students' language backgrounds." "Teachers need to be prepared for a more diverse population and understand how to facilitate learning for L2 learners. Too many teachers are ill prepared and too many students underserved."

Table 4.1 (continued)

Participant Responses to the TLA Course Requirement

Category	Number of Mentions	Examples of Participant Comments
Teachers' Own Deficiencies or Needs (continued)		"If we ourselves do not know proper grammar, spelling, and punctuation, we cannot effectively teach it."
		"Teachers need an ability and knowledge base to be able to help ELLs."
		"Content teachers are struggling with vocabulary."
		"Educators need to understand the language thoroughly so that they can find the most effective way of using it to teach their students."
		"Somewhere, someone realized that new teachers didn't know how to communicate well/appropriately with ESL students."
		"Teachers should all be prepared to work with ELLs and help them learn rather than marginalizing them and letting them slip through. Also, being able to teach content and language simultaneously…there will be less ESL classes, more students will be mainstreamed."
Theories of Language Acquisition	1	"Teachers need to be more aware of the process of language acquisition."

Table 4.2

Descriptive Statistics For Analyst Domain Pretest Task

Group	Test Time	*N*	Mean	Standard Deviation
Incidental	Pre	58	1.724	1.056
Deliberate	Pre	58	1.948	1.456

Table 4.3

Descriptive Statistics For Teacher Domain Pretest Task

Group	Test Time	*N*	Mean	Standard Deviation
Incidental	Pre	58	1.983	.737
Deliberate	Pre	58	1.552	.679

Table 4.4.

Descriptive Statistics For Analyst Domain Task

Group	Test Time	*N*	Mean	Standard Deviation
Incidental	Pre	58	1.724	1.056
Incidental	Post	58	1.707	1.622
Deliberate	Pre	58	1.948	1.456
Deliberate	Post	58	3.724	1.936

Table 4.5

Descriptive Statistics For Teacher Domain Task

Group	Test Time	*N*	Mean	Standard Deviation
Incidental	Pre	58	1.983	.737
Incidental	Post	58	1.914	1.096
Deliberate	Pre	58	1.552	.679
Deliberate	Post	58	1.672	.925

Table 4.6

Number of Participants Who Identified Vocabulary by Group and Test Time

Group	Test Time	Content-Compatible	Content-Obligatory	General Mention
Incidental	Pre	3	45	16
Incidental	Post	3	34	29
Deliberate	Pre	18	43	20
Deliberate	Post	14	34	13

Table 4.7

Number of Participants Who Identified Word Study by Group and Test Time

Group	Test Time	Word Study
Incidental	Pre	1
Incidental	Post	0
Deliberate	Pre	9
Deliberate	Post	4

Table 4.8

Number of Participants Who Identified Background Knowledge by Group and Test Time

Group	Test Time	Background Knowledge
Incidental	Pre	48
Incidental	Post	36
Deliberate	Pre	19
Deliberate	Post	10

Table 4.9

Number of Participants Who Identified Grammar and Conventions by Group and Test Time

Group	Test Time	Grammar	Conventions
Incidental	Pre	7	1
Incidental	Post	9	3
Deliberate	Pre	7	3
Deliberate	Post	12	5

Table 4.10

Number of Participants Who Identified Reading Strategies and Difficulty of the Text by Group and Test Time

Group	Test Time	Reading Strategies	Difficulty of Text
Incidental	Pre	8	4
Incidental	Post	2	6
Deliberate	Pre	2	4
Deliberate	Post	5	3

Table 4.11

Number of Participants Who Identified Functional Language by Group and Test Time

Group	Test Time	Functional Language
Incidental	Pre	0
Incidental	Post	0
Deliberate	Pre	2
Deliberate	Post	1

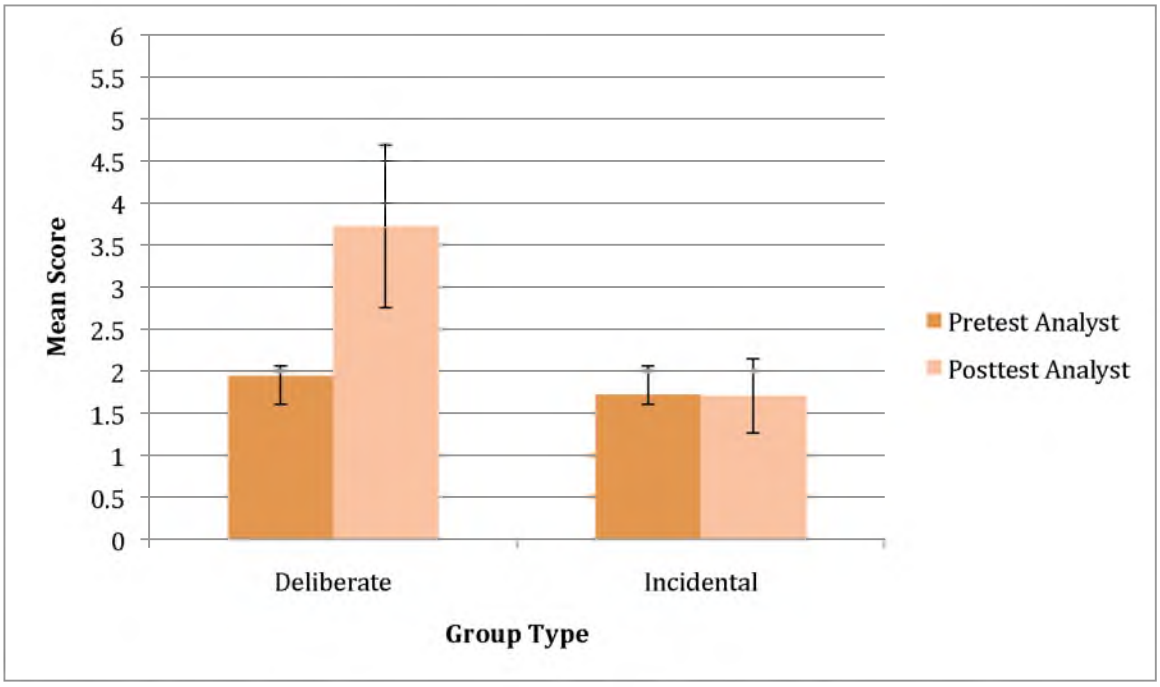

Figure 4.1. Comparison of mean scores on Analyst Domain task by group. Error bars represent standard deviation.

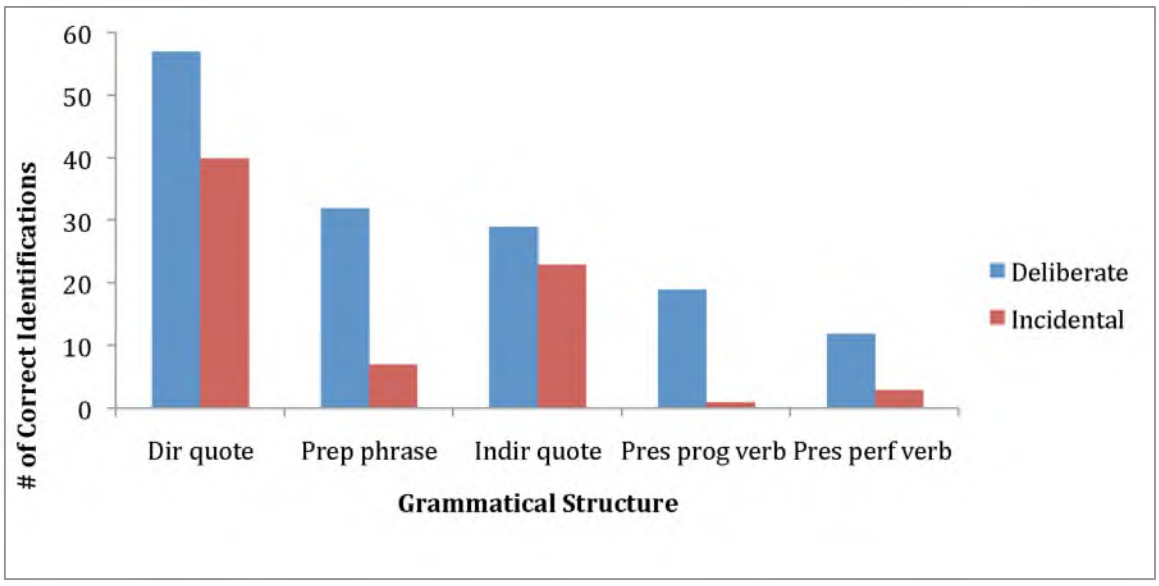

Figure 4.2: Grammatical Structures Identified Correctly at Posttest by group. List of grammatical structures is abbreviated, but a complete list may be seen in Appendix B. This figure illustrates identifications of the ten most correctly identified structures.

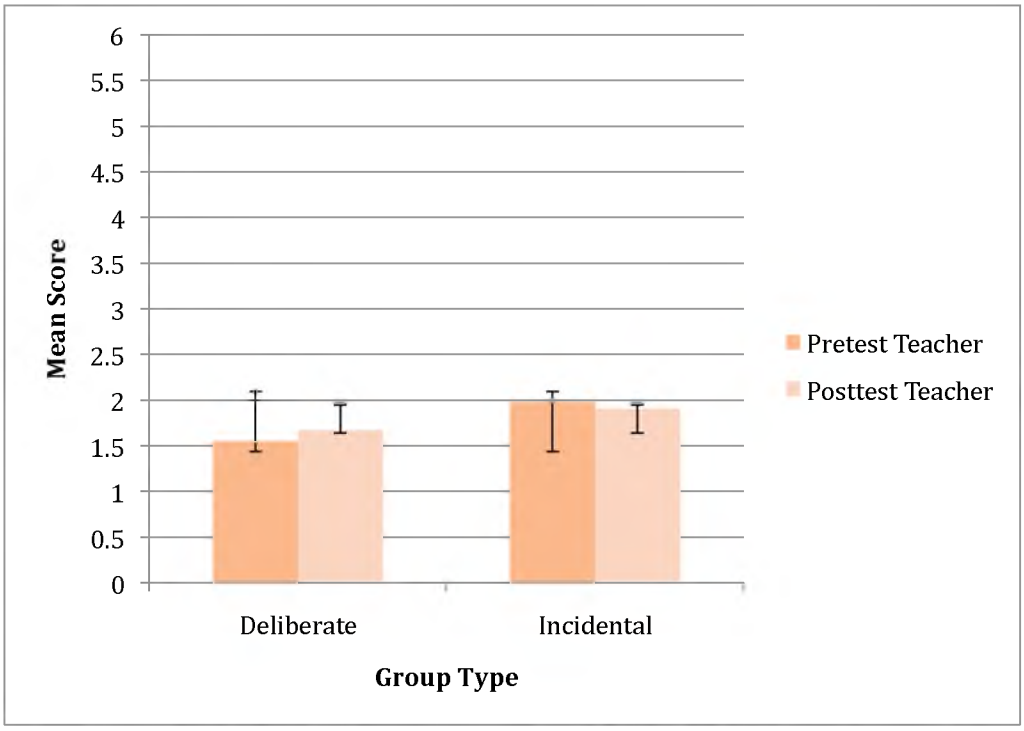

Figure 4.3 Comparison of mean scores on Teacher Domain task by group. Error bars represent standard deviation.

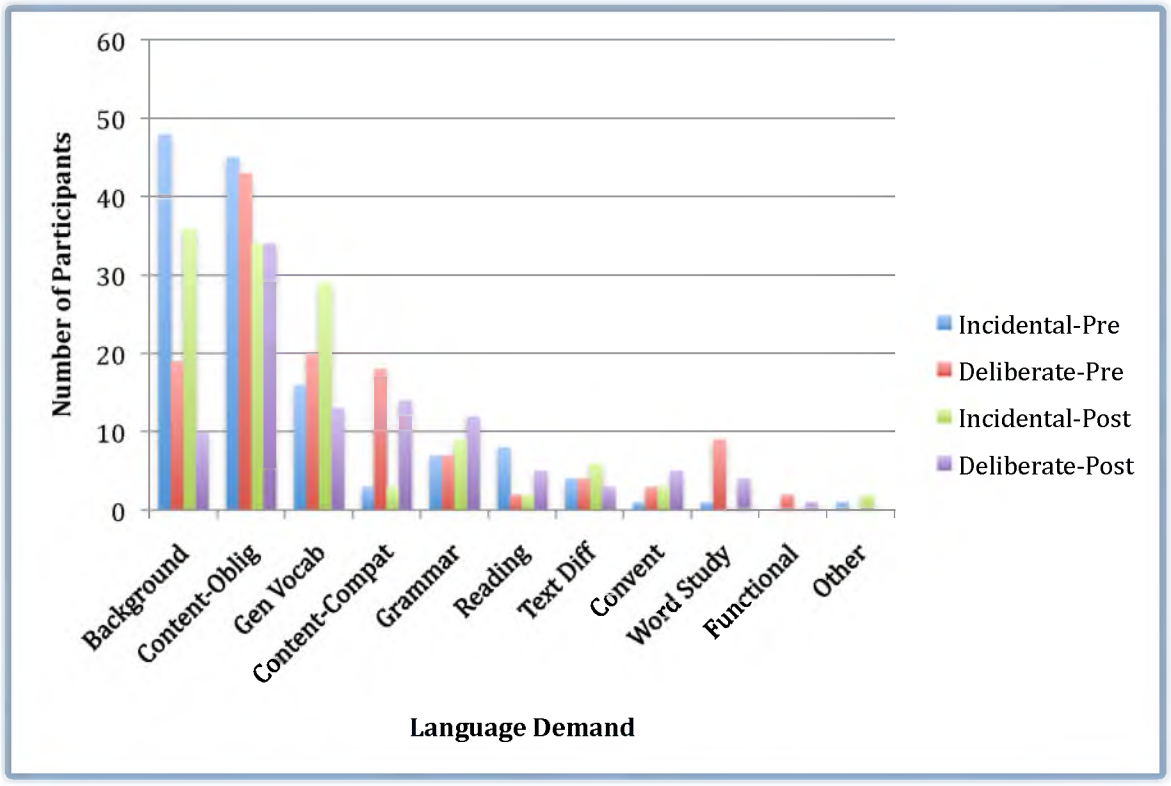

Figure 4.4. Comparison of language demands identified. This figure illustrates how many participants identified each language demands during the Teacher Domain task by group, and lists them beginning with the most frequently identified demand on the left.

CHAPTER 5

DISCUSSION

This chapter discusses both the quantitative and the qualitative results presented in the preceding chapter. Framed by the original three research questions of the study, the discussion will explicate the degree of teacher language awareness (TLA) possessed by preservice educators of English Language Learners (ELLs), the influence of focused second language (L2) coursework on their degree of TLA, and their conceptualization of how they developed TLA during that same coursework. The discussion highlights teacher conceptualizations in terms of the three domains of TLA—User, Teacher, and Analyst—and the ways in which preservice teachers grew relative to each domain. At the close of the chapter, implications of TLA development among K-12 educators are put forward in terms of how teacher educators may address TLA in educator preparation programs.

Initial Degrees of Teacher Language Awareness

The first research question posed by the study was, "What is the baseline of TLA held by preservice teachers enrolled in two university-level courses designed to develop effective skills for working with English language learners?" Originally, it was hypothesized that preservice teachers of ELLs would possess relatively low degrees of

TLA. The hypothesis was borne out through three of the study tasks: 1) participants' written reflections in response to the prompt, ""Why do you believe this class on teacher language awareness is required by the [teacher education program]," 2) participants' pretest mean scores on the Analyst and Teacher Domain tasks, and 3) participants' written reflections in response to the prompt, "How did you feel as you did the TLA tasks?"

Written Reflections

Qualitative analyses of participants' written responses described in Chapter 4 indicated that many of the participants did not understand why they were in a class about TLA, and most did not know what TLA was. Only one participant out of the deliberate group of 58 members identified TLA correctly in her response: "Educators need to understand the language thoroughly so that they can find the most effective way of using it to teach their students." While others had more general responses that touched on an issue surrounding the education of ELLs, such as changing population demographics, increasing linguistic diversity, or teacher efficacy, others did not make the connection between TLA and ELLs even though they knew the course was part of the ESL endorsement sequence. They listed reasons for studying TLA as the following: to improve overall communication, to develop public speaking ability, or to help teachers understand what they legally can and cannot talk about in a public school classroom.

These initial findings speak to existing themes in the literature as well. A prevailing premise in current research on ELLs in public school contexts focuses on the qualifications (or underqualifications) of the general educator in terms of being able to

provide effective instruction for ELLs. For instance, Gandara, Rumberger, Maxwell-Jolley, and Callahan (2003) studied teachers of ELLs in the state of California, and found that only 29% of them held any endorsement or certificate in a specifically related ELL field. Another study found that fewer than 8% of all teachers reported more than eight hours of professional development in ELL pedagogy (National Council of Educational Statistics, 2002). Teachers themselves perceive this underqualification, according to Batt (2008). The participants in her study reported feeling that not all educators were highly enough qualified to work with ELLs. They cited reasons such as not understanding diversity, not being well-trained, only completing minimum requirements for ESL certification, and being disadvantaged by never having learned a second language themselves.

Other research asserts that part of this underqualification has to do with being able to recognize a difference between general education methods and L2 methods that require TLA to implement. For example, Harper and De Jong (2007, 2008, 2009) have long investigated the concept of the *Just Good Teaching* (JGT) phenomenon, wherein the knowledge base and skills possessed by the L2 teacher are diminished by the notion that they are not really different from traditional general education pedagogical practices. They found that the mainstream classroom is considered the *idealized norm*, and argue that public school education for ELLs is based upon the assumption that ELLs can function in the same way as their native-speaking peers if they are served within the same frameworks for curriculum, content, assessment, teacher preparation, and student achievement (Harper & De Jong, 2009; p. 139). Cross (2011) also found that, despite the wide range of linguistic diversity in public schools worldwide, monolingualism remains

the dominant paradigm, particularly in literacy instruction. This deference to the monolingual mainstream may also be present in teacher education programs, therefore causing teachers to be less aware of the fact that working with diverse learners requires more than strategies or a *toolkit* but an entirely different (or supplemented) knowledge base.

Participants' responses to the question asking them why they need a class on TLA may be indicative of the fact that they were not entirely cognizant of the need to be aware of language in order to effectively teach ELLs. Participants may not have perceived a need to study language because they considered themselves as grade-level or content-area teachers, rather than language teachers, a perception that has been noted among other studies involving K-12 teachers (Echevarria, Vogt, & Short, 2012; Kim, 2007). The current study's participants' lack of awareness of what TLA entails may be due to the fact that many of them did not plan to become ESL specialists, but were enrolled in the course because the ESL endorsement sequence was built into the university's teacher licensure program. Out of all the participants in both groups, no one reported planning to teach ESL specifically.

Pretest Mean Scores on the Analyst Domain

Other results from the present study that support preservice teachers' possessing low degrees of TLA are their scores on the Analyst Domain pretest. Out of the twenty grammar constructions possible on the Analyst Domain pretest task, the deliberate group only identified an average of 1.948 of them and the incidental group only identified an average of 1.724 of them. Two of the three most-identified structures were actually

writing conventions instead of grammar (a direct quote and an indirect quote), and the grammar construction that was identified was a rather transparent one—a prepositional phrase. These results are also consistent with the findings that, even among declared L2 specialists, novice teachers tend to have lower levels of declarative TLA than experienced teachers. (Andrews, 2007). Bigelow and Ranney (2005) reported similar findings in the study from which the Analyst Domain task was replicated, wherein the preservice teachers in their study mostly identified verb tenses, but neglected structures such as adjectives or interrogatives.

The low scores on the Analyst Domain task also speak to the "native speaker fallacy," or the notion that the ideal teacher of English is a native speaker, when in fact, many native speakers of a language do not have explicit knowledge about their own language and, therefore, find it difficult to explicitly teach it (Philippson, 1992). In support of this, Andrews (2007) notes that, in the 1980s and 1990s, providers of training in TLA realized that most native speakers of English below a certain age had no experience of studying English grammar, even at school. Being monolingual and without any study of English grammar would also account for the low Analyst Domain pretest scores exhibited by both incidental and deliberate groups in the present study.

Pretest Mean Scores on the Teacher Domain

Pretest results on the Teacher Domain task were also low. Of the 10 possible language demands that participants could have identified, the mean scores of both groups were again below two (deliberate group mean score=1.552, *SD*=.679; incidental group mean score=1.983, *SD*=.737). In addition to only identifying an average of two language

demands, it is also noteworthy that most preservice teachers identified the same two—vocabulary and background knowledge.

This ability in PSTs is consistent with studies that describe how teachers tend to operationalize language demands as principally vocabulary, rather than other areas of academic language. Regalla's (2012) four case studies on teachers and language objective development illustrated that the main focus of the teachers' language objectives was vocabulary, which took precedence over other components of academic language, such as grammatical structures, academic conventions, and functional language. A similar result cited in Bigelow and Ranney (2005) was that preservice ESOL teachers tended to write language objectives about the language modalities or skills, such as listening, speaking, reading and writing, rather than more specific components of language, such as types of verbs, complex sentences, and language functions. Overall, many of the language goals written by teachers in contexts where content and language are taught simultaneously tend to be limited in range, primarily referring to vocabulary and verbs over other areas such as functional language, conventions, and grammar points outside of verb forms (Fisher & Frey, 2010).

The second language demand that was identified--background knowledge--was likely recognized due to the obvious cultural differences that a United States history topic such as the Civil Rights movement may present. In addition, many of the participants in both groups (86 out of 116 with 48 from the incidental group and 28 from the deliberate group) had already completed a course on multicultural education; therefore, it is logical to assume that their cultural awareness may have been heightened by their previous coursework. Further explication of the language demands identified and their

implications follows in the discussion of the second research question about how degrees of TLA did or did not improve.

Attitudinal Factors

A third body of data supporting the notion that participants' degree of TLA was low may be found in their responses to the pretest tasks themselves. Andrews (2007) includes attitude in his conceptualization of TLA because he asserts that the teacher's self-confidence, or lack thereof, with grammar indicates a level of readiness on behalf of the teacher to give serious attention to language-related pedagogical issues. Overall, the preservice teachers in the present study conveyed very negative reactions to the pretest tasks in both Analyst and Teacher Domains in the form of frustration about their lack of knowledge about language, either because they had never learned it or they had forgotten it. Andrews' (2007) findings support this, as he noted that, especially for native speaker teachers who were less likely exposed to formal grammar teaching as students themselves, much ambiguity about the role of grammar and how it is best taught and learned exists. This can lead to feelings of doubt and insecurity about their own TLA.

In addition to frustration at not being able to complete the tasks, participants from both groups correlated their poor performance on the tasks with their intellect, and they also said that they felt impotent in terms of being able to perform well on the tasks. Participants utilized terms such as, "not smart," "moron," "stupid," "ashamed," and "incompetent" when describing how they felt as they did the tasks. The pejorative terms employed by the participants are noteworthy for two reasons. First, we may assume that if individuals feel negatively toward language instruction or lack confidence in it, they

are going to be less likely to include it in their teaching practice. Second, if teachers are associating English grammar knowledge with their own intellect, they may also be doing the same with their students, meaning that they may consider students with lower proficiency in English or those who use nonstandard forms of English grammar as less intelligent (Wheeler, 2008).

Changing Degrees of Teacher Language Awareness After L2 Coursework

The second research question in the present study was, "How does the baseline of TLA change between preservice teachers who have completed an L2 methods course with incidental instruction about TLA, and those who have completed an L2 methods course with deliberate instruction about TLA?" Originally, it was hypothesized that after a semester-long intervention in the form of a course that deliberately taught about the Analyst domain of TLA, participants enrolled in that class (i.e., the deliberate group) would demonstrate improved scores on the posttest Analyst domain task. In addition, it was expected that participants who were enrolled in the course that taught L2 methods, but with a more incidental focus on TLA (i.e., the incidental group) would demonstrate improved scores on the posttest Teacher Domain task. Below, the results from each task are reiterated and situated in the existing literature.

Changes in the Analyst Domain

As a reminder, the Analyst Domain includes knowledge about language (KAL), which can include grammar, orthography, the language modalities, pragmatic use,

discourse analysis, and sociolinguistic variation (Bartels, 2009). The researcher recognizes that KAL is not a finite set of knowledge, and can actually change depending on the learners being taught and the context in which the teacher finds him or herself (Bigelow & Ranney, 2005; Burns & Knox, 2005). To maintain a more narrow scope in this study, the Analyst Domain task operationalizes KAL as grammar, specifically, written grammar.

With regard to participants' KAL in the form of grammar, the first part of the hypothesis proved true: after a semester-long intervention in the form of a course that deliberately taught about the Analyst Domain of TLA, participants enrolled in that class (i.e., the deliberate group) demonstrated improved scores, as their mean increased from 1.948 to 3.724 out of 20 possible items. The most identified grammatical constructions by the deliberate group on the Analyst Domain task were a direct quote, an indirect quote, and a prepositional phrase, which were essentially the same as those identified by participants on the pretest measure. As expected, participants from the incidental group demonstrated mean scores that remained essentially the same: 1.724 on the pretest to 1.707 on the posttest out of 20 possible items. The most identified grammatical constructions by the incidental group on the Analyst Domain posttest task were also a direct quote, an indirect quote, and a passive verb, which were essentially the same as those identified by participants on the pretest measure.

Why does a preservice K-12 teacher's degree of KAL in the Analyst Domain matter? Historically, a debate exists in the L2 field over whether grammar should be taught deliberately to L2 learners; some argue that encouraging implicit grammar instruction causes teachers to lessen the intensity of their focus on grammar, and in turn,

attend less to their own KAL. Andrews (2007) asserts that communicative language teaching (CLT) challenged the prevalence of grammar form-focused instruction in ESL and EFL contexts, because it altered the attention from teaching language as a system to teaching language as communication. Some mistakenly think that CLT approaches demoted grammar in a way, because communicative success did not necessarily require it. However, an emphasis on teaching grammar in communicative contexts has both shifted, and some might argue, complicated the role of L2 teacher. With the focus no longer on presenting grammar rules and correcting students as they work through structured exercises, L2 teachers must instead analyze communicative tasks to determine the language demands inherent in them, and subsequently make decisions about how to help learners acquire the linguistic knowledge and skills (Bigelow & Ranney, 2010).

The highly contextual content-based (Snow & Brinton, 1997) or sheltered instruction approach is widespread in K-12 public schools, wherein teachers strive to teach content and language simultaneously, often to heterogeneous groups of native speakers and ELLs (Echevarria, Vogt, and Short, 2012; Short, 1999). "One of the most salient characteristics of content-based instruction or immersion education is that the main focus of attention in the teaching is not on language but on the subjects in the curricula that are being taught *through* the [L2]" (Johnson, 2001; p.152). While many benefits of content-based or sheltered instruction exist, such as higher context for language learning, more inclusionary practices, native-speaking peer language modeling, and equal access to curriculum and materials, the ability of teachers in these contexts to focus on language becomes problematic.

First and foremost, despite an emphasis on balancing content and language teaching in CBI contexts, teachers have been found to place importance on content learning goals over language development goals (Bigelow & Ranney, 2005; Kong & Hoare, 2011; Short, 2002; Stoller & Grabe, 1997). In a survey-based study by Kim (2007), it was found that teachers rated themselves lower in terms of knowledge about language objectives as well as lower in how much they valued them as a pedagogical practice over content knowledge and the ability to create content objectives. Creese (2005) also noted that the content teachers in his study modified their own input, but they rarely encouraged the students to modify their input, nor did the teachers provide linguistic feedback, or negotiate incomplete messages with students (p. 151).

Because of evidence such as this, Lyster (2007) contends that "much incidental attention to language is too brief and likely too perfunctory to convey sufficient information about certain grammatical subsystems and this, in those cases, can be considered neither systematic nor apt to make the most of content-based instruction as a means for teaching language" (p. 27). Additional commentary from Hinkel and Fotos (2002) maintains the importance of explicit language instruction, claiming that approaches wherein teachers have learners engage in meaning-focused tasks and then coincidentally absorb the language used in those tasks is not effective when it comes to the high levels of grammatical competence required for academic and professional speaking and writing. This concept is particularly relevant for teachers who strive to develop academic English for their ELLs in hopes of narrowing the achievement gap. Without deliberate attention to language during content-area instruction, academic language is less likely to develop.

One possible reason that it has proven difficult for K-12 teachers to provide this deliberate attention to language, and, therefore, balance content and language in instruction, is that their knowledge about language (KAL) is underdeveloped. The participants' posttest scores on the Analyst Domain in the current study bear this out, as the incidental group scores did not improve at all, and while the deliberate group's scores showed statistically significant improvement, they were still not very high, with mean score at 3.7 out of 20. This meant that even after a semester-long course on TLA, deliberate group participants could still only identify 18.5% of grammar constructions in context.

The fact that the participants in the incidental group did not improve their scores on the Analyst Domain posttest is noteworthy as well, because they were exposed to a typical and traditional form of L2 teacher education, wherein the primary course focus is more on methodology, such as strategies, interaction, schema activation, and the theories underlying these methods. Traditionally, it has been assumed by the L2 teacher education field that in learning L2 methodology, preservice teachers would learn to pay deliberate attention to language. To the contrary, these results indicate that, just like their ELL students who will not learn academic language by merely participating in classroom activities that use said language, teachers may not improve their knowledge about language by learning about L2 methods. In fact, without direct intervention, Andrews (2006) found that the KAL of EFL teachers working in the field did not change over an 8-year time span. These findings are additional evidence that knowledge about language must be explicitly taught and is not a component of pedagogy that is absorbed or "picked up" over time.

Changes in the Teacher Domain

In contrast, the second part of the hypothesis—that participants in the incidental class with a focus more on methodology and strategies than on language would improve on the Teacher Domain task—was not borne out, as scores on this measure remained essentially the same on pre- and posttest tasks for both groups. As a reminder, the teacher Domain entails the ability of teachers to empathize with the ELL experience, which has been operationalized via the ability to identify what aspects of a content-area text would be difficult for ELLs, i.e., the ability to recognize the academic language demands of the text. Yet, in order to do this, academic language itself must be understood and defined. This is one way in which the current study deviates from the existing literature on TLA, in that the type of language that K-12 teachers are required to be aware of is often more highly academic than the type of language that EFL specialists have to be aware of, and most preexisting studies on TLA were conducted in EFL contexts.

Parameters exist as to what constitutes academic language and the subsequent language demands that academic language poses for ELLs, yet concise definitions are somewhat lacking in the literature (Bailey, 2006). Academic language is essentially the language of academic discourse, and embedded within it are different disciplinary registers that each have their own vocabulary and associated grammatical constructions (Coxhead & Byrd, 2007). For the purpose of this discussion, the definition provided by Nagy and Townsend (2012) will be used: "Academic language is the specialized language, both oral and written, of academic settings that facilitates communication and thinking about disciplinary content" (p. 92). Five characteristics distinguish academic language from conversational English: 1) Latin and Greek vocabulary; 2)

morphologically complex words; 3) higher proportion of nouns, adjectives and prepositions; 4) grammatical metaphor (wherein a part of speech is used with a meaning not prototypical of that part of speech), including nominalizations (i.e., turning some other part of speech into a noun); 5) informational density (the ratio of content words over total words is greater in academic language); and 6) abstractness (Biber, 2006; Nagy & Townsend, 2012). Similarly, Schelppegrel (2004) employs the term, "literate language," which she characterizes in terms of its decontextualization, explicitness, complexity, and cognitive demands. She also acknowledges the cultural and the experiential aspects of language use that are inherent in what she terms, *the language of schooling*.

Language demands exist in both everyday, functional language (White, 2011) and, in the context of schools, are also derived from academic language. They vary in terms of both the age of the learner and the different content; each grade level or content discipline presents varying lexical, syntactic, and discourse demands (Bailey, 2006). For example, at the elementary level (Grades K-6), new common core curricula being implemented have increased language demands due to a larger focus on informational text in the primary grades (Roberts, 2012). At the secondary level (Grades 7-12), the disciplinary registers of the various content areas make academic language increasingly complex (Schleppegrell & O'Hallaron, 2011). Thus, K-12 educators must become adept at identifying which components of the academic language present at their grade level and in each content area might be challenging for ELLs. From this ability to identify language demands comes the teacher's ability to specify the most appropriate learning objectives--particularly language objectives, which serve as an operationalization of the

language demands inherent in a lesson. This in turn can affect teachers' ability to select the materials and tasks that are most likely to serve those objectives, to ensure that the objectives are appropriate in terms of the learner's age, previous learning and present stage of interlingual development, and to have the objectives align with the desired learning outcomes (Andrews, 2001).

It is of concern that preservice teachers would not improve on identifying language demands after a semester-long course that provided instruction on integrating language and content. This outcome is not unheard of, however. Identifying language demands, which is most typically operationalized by teachers composing language objectives, has long proven difficult for even L2 educators, let alone general educators whose knowledge about language and ability to empathize with ELLs may be lower than those who specialize in L2 teaching and learning. One main factor that may be influencing teachers' ability to identify language demands could be their own linguistic profiles as monolinguals who are teaching in (but not necessarily about) their native language. Many of the participants had studied foreign languages, yet still reported their proficiency as being "beginning or limited" despite having studied the language for approximately three years (2.57 for the Incidental group and 3.05 for the Deliberate group). Only 5 participants out of 118 reported being fluent in another language. As such, despite foreign language study and the presence of various languages in participants' homes, overall the participant group can be considered monolingual native speakers of English. In comparing native-speaking English teachers with non-native speaking teachers, it may be harder for the native-speaking teacher to empathize with their ELLs because they do not have any distance from the language, whereas studies have shown

that non-native speaking teachers may be more sensitive to the complexities and generalizable aspects of language because they themselves have had to learn one (Llurda, 2005; Medgyes, 1994; Seidlhofer, 1999). In a comparison of native-speaking and non-native speaking English teachers' ability to identify vocabulary that their ELL students found difficult, McNeill (2005) found that the native-speaking teachers generally failed to identify words that their students found difficult, whereas the words identified by the non-native speaking teachers were much more aligned with the ELL students' perceptions. In addition, in her biographical study of monolingual ESL teachers with limited L2 learning experience early in their careers—much like the participant group in the current study--Reeves concluded that the teachers' L1 knowledge of English as native speakers did not provide them with the linguistic knowledge they needed for effective ESL teaching (2009).

Therefore, when presented with a lesson or text, it is logical that a monolingual native-speaking teacher would find empathizing with ELL students challenging. The implicit nature of language to the native speaker, i.e., its invisibility, may be one reason that participants on the posttest exam were still not adept at identifying the components of academic language. Below, the language demands that emerged from both the existing literature and the components of language mentioned by the participants are discussed.

Vocabulary. Both incidental and deliberate groups principally identified vocabulary above all the other demands, consistent with the findings of Bigelow and Ranney (2005) and Regalla (2012). Vocabulary is, in fact, hugely important for ELLs, and has serious ramifications for their academic language development, particularly in reading (Coady, Huckin, & Haynes, 1993). Much of the literature asserts that explicit

vocabulary instruction is preferred for ELLs (August, et al., 2008) over implicit or incidental vocabulary instruction for two key reasons. First, ELLs tend to be less able to use context to decipher unfamiliar words, because they are less likely to know that many words in the text. Secondly, because ELLs may have less of a command of English grammar, they may not be able to utilize linguistic cues to word meaning as a native speaker would (August et al, 2004). Thus, it is crucial that teachers not only be able to identify which vocabulary terms are suitable for vocabulary instruction, but also be aware of grammar so that they may also coach learners on how to make use of the aforementioned linguistic cues.

Content-compatible vocabulary. It is noteworthy that fewer participants identified content-compatible vocabulary, because content-compatible vocabulary, sometimes called general academic vocabulary, includes many terms that are relevant across curricula and content areas, and, thus, may actually be more useful to ELLs in the long run than only learning content-obligatory terms. For example, Stanovich (1986) found that, among native speakers of English, lack of knowledge of moderate to lower frequency "academic" words impeded text comprehension, which in turn impedes the natural process of learning new word meanings from exposure during reading. In research specifically on ELLs, Townsend et al. (2012) observed that, among over 330 diverse middle-school age students, knowledge of general academic terms explained significant and unique achievement in math, social studies, science, and language arts. Indeed, the example of the Academic Word List compiled by Coxhead (2011), a corpus of words that students at each grade level should know, consists almost entirely of content-compatible and functional language terms. In analyzing this word list, Bushong

and Folse (2012) also discovered that many of the terms on this list are also cognates in Spanish. Other authors, such August et al. (2008) and Nagy, García, Durgunoğlu and & Hancin-Bhatt (1993) assert that cognate awareness is a key part of vocabulary instruction for ELLs; thus, the Academic Word List or similar bodies of the lexical items may be very useful to teachers in identifying which content-compatible words to teach. In a vocabulary-intervention study, August et al. (2004) found that with an intervention focused on general-purpose academic words likely to be encountered in multiple content areas, vocabulary knowledge and reading comprehension improved for both the ELLs and the native speakers in the participating classrooms. As such, recognizing these types of words as language demand is a crucial skill for teachers of ELLs.

Word study. As a sort of subsidiary to vocabulary, word study, defined above as the process of analyzing words outside of their context for components, such as prefixes, suffixes, affixes, pronunciation, etc., was mentioned by one single participant out of 116 on the pretest measure, and only by 13 on the posttest measure, Yet, participants from the deliberate group, i.e., those who had received deliberate instruction on topics such as morphemes and phonemes, improved their noticing of this particular demand. This substantiates the notion that focused instruction on these types of structures may promote noticing of them in input later on, which in this case was a sample content-area lesson (Schmidt, 1990). Likewise, explicit instruction in phonology and morphology of English words that differ from ELLs' L1 may aid in developing both oral language proficiency, which is in turn linked to key components of early literacy, such as phonemic awareness and fluency (Au, Garcia, Goldenberg, & Vogt, 2002; August & Shanahan, 2007).

Background knowledge. Background knowledge was almost paramount to vocabulary in terms of how many participants identified it as a language demand. This is important because it indicates that teachers are addressing the importance of students' schema in text comprehension (August & Shanahan, 2007). Moreover, some research shows that teachers have a hard time balancing the cultural and linguistic needs of students in an L2 classroom (Byrd, Hlas, Watzke, & Montes-Valencia, 2011); consequently, the participants' ability to recognize the demands that differing background knowledge places on culturally and linguistically diverse students is reassuring.

Interestingly, the incidental group overwhelmingly identified background knowledge on both the pre- and posttest more often than the deliberate group. This could be for a variety of reasons. First, participants' own previous coursework may have influenced their responses. More of the participants in the incidental group had completed or were enrolled in the required course on multicultural education, which addresses differences in cultural perspectives, than the deliberate group participants. Many had taken other classes in the ESL endorsement sequence, but the incidental group reported taking more of the courses such as Introduction to Linguistics (26 incidental group members vs. 6 deliberate group members), Educational Linguistics (24 incidental group members vs. 6 deliberate group members), Intro to Multicultural Education (48 incidental group members vs. 6 deliberate group members), and Home, School, and Community Relations (52 incidental group members vs. 6 deliberate group members). Also, almost every one of the incidental group participants was planning to specialize in elementary education, where only half of the deliberate group was. Elementary education methods, with a focus on early literacy development, may place more of an emphasis on the role of

schema in text comprehension, while secondary education methods may focus on more on content-area literacy development due to the older age of the learner and the assumption that they will already have literacy skills (Vacca & Vacca, 2008).

Grammar and conventions. Both participant groups improved in their frequency of identifying grammar as a language demand, although the deliberate group identified it more than the incidental group.

Still, the number of participants who identified grammar as a language demand was relatively low given the context of the task in which teachers are supposed to be considering the needs of ELLs. Only 21 participants out of 116 identified it as a language demand after a semester of L2 coursework, and even those deliberate group participants who, as a whole group, improved upon their ability to recognize grammatical structures, mostly failed to identify it (12 out of 58 participants). As discussed in the section on the posttest results of the Analyst Domain, as a group these particular participants did not demonstrate high degrees of knowledge about language in terms of grammar, nor did they demonstrate an awareness of this particular demand in a content-area text. Again, this may be due to their own language backgrounds as primarily monolingual and lacking explicit knowledge of their L1 (Llurda, 2005), their lack of exposure to explicit grammar education during their own school experience (Andrews, 2007), or their lack of experience as L2 learners (Reeves, 2009).

Reading strategies and the difficulty of text. The results that focused on participants' abilities to identify either reading comprehension strategies and/or the difficulty of the text itself were erratic. Participants in the incidental identified reading comprehension strategies more on the pretest measure than on the posttest measure;

meanwhile, participants in the deliberate group improved in their identification of reading comprehension on the posttest measure, but still only slightly. Identification of the difficulty of the text increased from pre- to posttest among the incidental group, but decreased from pre- to posttest among the deliberate group.

While these inconsistent results cannot necessarily be explained, perhaps the finding worth mentioning is simply that teachers did not mention reading strategies or text difficulty very often at all. The implications of teachers not identifying this language demand are considerable, as literacy acquisition by ELLs is a major factor in their academic success (August & Shanahan, 2007). In addition, low "reading levels" as assessed by a multitude of exams in the primary grades, are often the reason that ELLs are referred and placed in Special Education programs (Barrera, 2006). This in itself bears its own implications, as it can result in over- or disproportionate representation of language minority students in programs designed for students with learning disabilities, rather than language differences (Diaz-Rico & Weed, 2010).

Functional language. Another language demand that participants in either group rarely identified was functional language. Only 3 participants out of 116 mentioned language functions, and all 3 were members of the deliberate group.

This is somewhat surprising, due to the functional, situated nature of school itself (Halliday, 1994; Schleppegrell, 2004). Halliday (1994) posed various functional categories of language, such as personal, informational, heuristic, humorous, etc. Many of these categories, such as informational and heuristic, are widely present in the academic discourse of school (Schleppegrell, 2004). Functional language plays a role in how different academic disciplines use grammar to construct their particular discourse,

and therefore is highly related to the ways in which students and teachers can employ grammar as a meaning-making resource (Schleppegrel, 2004). For example, the content area of social studies (which was used in this current study) presents certain functional grammatical demands on language, such as time, cause, agency, abstraction, and interpretation (Schleppegrel & Oliveira, 2006). For students to be successful in this content area, they would need to know the language associated with all of those functional aspects of language—none of which are content-obligatory vocabulary terms. Thus, ELLs in this case would be well-served if their teacher based instruction on social studies content as well as language objectives that address grammatical and linguistic aspects of time or cause. The content requirements for ELLs make their education more complex, yet learning language through content is one of the most powerful ways to do it. Teachers must design lessons that target the linguistic demands of the communicative function involved (Bigelow & Ranney, 2010).

Attitudes, Perceptions, and Experiences Underpinning TLA

The focus-group interviews provided insight into the particpants' TLA that could not be derived from the quantitative data alone. In conversing with the participants, I found that their attitudes toward TLA were increasingly positive, and they were able to be less ambiguous about defining TLA and a rationale for including TLA for mainstream educators. In addition, they exhibited a greater awareness of ELL students' possible proficiency levels, and cited an increase in their pedagogical content knowledge in terms of having a repertoire of strategies and methods to incorporate with ELLs. However, participants in both the incidental and deliberate groups still failed to make connections between the course information that was presented to them, the

course tasks designed to help them implement the information, and the ways in which they might apply the course tasks to the real-world endeavor of teaching.

Issues in Teacher Cognition Connected to Teacher Language Awareness

The results of the current study support the assertion that, for mainstream preservice teachers (PSTs) of English Language Learners (ELLs), language itself is indeed an "invisible medium"—a nontangible mode of instructional delivery of which they are not entirely aware. Not only were preservice educators unable to identify many grammatical structures in a sample text, they demonstrated difficulty in recognizing the various language demands inherent in an academic text. Given that the academic language requirements of today's public schools are only increasing, this low degree of awareness on behalf of the teacher lends even more gravity to the issue of effectively educating ELLs in these contexts. As Andrews (2007) explains, "In so far as the teacher does engage with content-related issues, the quality of that engagement, in whatever form it takes, will potentially be affected to a large extent by the Teacher Language Awareness (TLA) of that teacher" (p. 95).

Much of the research on language teaching pedagogy published in the last decade calls for teachers to have some explicit knowledge about language--specifically, academic language. Beginning in 2000, Johnston and Goettsch found that education and experience greatly informed teachers' KAL. They concluded that language teachers need foundational knowledge about the language they teach—not just proficiency in the language that they teach--and should be required to take courses that develop this

knowledge in their teacher preparation programs. Schelppegrell (2004) also asserted that mainstream teachers require greater knowledge about the linguistic basis of what they are teaching, along with "tools" for helping students understand the ways in which language is used in the texts that typically construe specialized knowledge in school contexts. Bailey, Burkett, and Freeman's (2008) conclusions support the notion of "thinking linguistically" (p. 607), while, with regard to students' developing complex knowledge about content, Kong (2009) stressed the need for students to explore content in depth and from different perspectives. She claimed that this would in turn enable complex knowledge relationships to be constructed by the teacher and students through the use of correspondingly complex language. However, she also adds that this process requires teachers to be aware of the language form-function relationships that not only exist in each academic discipline, but also distinguish one academic discipline from another. In terms of academic vocabulary development, Nagy and Townsend (2011) suggested that teachers need to model their understanding of academic language, and in doing so, they also need to call attention to specific structures in that language. Finally, in a 2011 synthesis of research on adolescent L2 learners and pedagogical practices, Schleppegrell and O'Hallaron cited three components of efficacy: 1) teachers need knowledge about how language works in their subject areas, 2) academic language development calls for careful planning across a unit of instruction, and 3) students need support for engagement in classroom activities that promote simultaneous content and language learning.

All of these suggestions and recommendations presume that teachers possess a priori knowledge about academic language simply because they are native speakers of the language. However, this is not necessarily the case when it comes to explicit KAL. It is

quite possible that no matter what "*toolkit*" of strategies or pedagogical activities a teacher may employ, without knowledge about academic language, the utilization of that strategy may be less effective. To draw a comparison, instruction of L2 learners by a teacher without language awareness may be like trying to pound a nail into wood by using a screwdriver or wrench instead of a hammer—the carpenter might eventually get the nail in, but the process could be messy and will likely take a lot longer than if had he employed the correct tool in the beginning. Indeed, Schleppegrell warns that research on any interventions used by teachers for purposes of increasing students' control over academic language presuppose research that still needs to be done on what teachers know and do not know about the language demands of their content areas (2004).

Wright and Bolitho's (1993) sentiment of "The more aware a teacher is of language and how it works, the better," still rings true. Yet, as Bigelow and Ranney (2010) state, "KAL for KAL's sake is of little use to teachers" (p. 221). They follow by explaining that KAL is useful in shaping teacher conceptions of language but does not always transfer to teaching, leaving a gap between the declarative knowledge of the Analyst Domain and the procedural knowledge of the Teacher Domain (see Andrews, 2003; 2007; Bartels, 2005b; Bigelow & Ranney, 2005; Reeves, 2009). Bartels (2009) cites one possibility for teachers' failure to use the explicit knowledge about language available to them in order to employ the pedagogical option that is best supported by evidence as the "cognitive bottleneck." In this explanation, Bartels argues that, cognitively, humans use the working memory to explicitly figure something out. Humans also are able to maximize cognition when we are able to reduce the amount of information that we process explicitly. Thus, a "cognitive bottleneck" occurs when a

human being is trying to process too much explicit information—the working memory may become overloaded. This could be why teachers tend to rely on implicit knowledge when faced with time constraints and impromptu decisions: implicit knowledge requires less of the working memory, and in terms of the brain, is more efficient.

Logically, then, the next step is to explore how to aid educators of ELLs in successfully integrating the Analyst Domain of TLA with the Teacher Domain of TLA, i.e., transferring their KAL to their pedagogical practices and making KAL relevant. Bartels (2009) advocates for the inclusion of more knowledge that could reduce the cognitive load of teachers, including implicit knowledge, specific local knowledge of the language problem and possible solutions to it, complex knowledge such as the domain-specific factors relevant to teaching, and dynamically linked knowledge that is organized around the activities typical of L2 instruction. This inclusion of more knowledge translates to allowing educators opportunities to participate in activities central to teaching to provide them with an authentic experience of using their various knowledge bases. It also means increasing a focus on more local details and issues in the language community to increase relevance to teachers, which corresponds to their being able to link and organize local knowledge via activities that require them to situate their KAL in different ways. The approach of what Tsui (2003) dubs *theorizing practice*, wherein people abstract more general ideas about a situation from given examples in practice, also works with KAL; however, Bartels cautions that generalizable KAL is better developed when it is situated across contexts, rather than when teachers are simply provided with general KAL in hopes that they can figure out what it means and how to use it in specific situations on their own.

Some challenges to KAL development exist, and teacher educators would be wise to take heed of these when planning to include TLA components into their preparation programs. A primary consideration for TLA development is explicit practice, wherein educators deliberately design and participate in activities that help them learn more about TLA (Bartels, 2009; Bigelow & Ranney, 2010). L2 teacher educators must concede that all aspects of TLA are developed via regular teaching practice. Bartels (2009) cites four reasons that specific KAL is rarely developed during actual teaching practice. The first reason is that teaching requires such a high cognitive load that little room is left for learning. Second, actual teaching practice may offer inconsistent exposure to the desired situation in which the use of KAL would be applicable, and the third is that not much accurate feedback is available to the teacher as to whether their application of the KAL was correct. Finally, he notes that constraints on time, context, and practice may not be flexible enough to allow teachers to design instruction so that they can actually learn from it. As such, development of the Analyst Domain during preservice teacher education—before teachers become overwhelmed by the multiple duties facing the novice teacher—becomes critical. Bigelow and Ranney (2010) concur, listing the promotion of language awareness behavior, encouraging teachers to become language explorers, and developing attitudes that promote KAL integration with teachers' pedagogical content knowledge as ways that teacher educators may integrate KAL in their classes. This attention to attitudinal factors, which revealed themselves to be a salient issue for the preservice teachers in the current study, may help teachers maintain "a spirit of inquiry as language explorers," which may in turn help reduce the anxiety that

some new teachers have about knowing all the "rules" of the language they hope to teach or are teaching (Bigelow & Ranney, 2011, p. 220).

As stated in earlier chapters, TLA is much more than simple knowledge about language or being aware of it. Instead, the construct of TLA speaks to the nature of the pedagogical knowledge base required to be effective in diverse educational contexts, as well as to how teachers both acquire and use new knowledge. This in turn calls attention to the development of teacher identity within these diverse contexts, and a determination as to whether the designations of "content-area" teacher, "mainstream" teacher, or "ESL specialist" are still germane to the field. What could be necessary is a deeper understanding of teacher identity development via biographical approaches to the knowledge base of L2 teacher education (Bigelow & Ranney, 2010; Kanno & Stuart, 2011; Reeves, 2009).

This biographical approach must be done in moderation, however. A focus on life experiences in L2 teacher education has potentially led to knowledge about language assuming a lesser role in teacher training programs (Yates & Muchisky, 2003). Rather than focusing so much on the teacher's background, Yates and Muchisky contend that knowledge of language and second language acquisition should remain the focus of L2 teacher education. Thus, fundamental skills for L2 educators would include the ability to reflect upon linguistic structures and organization, theories and processes of language learning, and the influence that particular instructional contexts bear upon teaching. Still, considering both teachers' backgrounds and what they will learn as they become practicing teachers is essential, as the teachers in the current study demonstrated that their language learning and coursework experiences influenced their TLA. Ideally, teacher

preparation programs should help teachers develop a willingness to engage in reflection about the content of learning; encourage a belief in focusing on language form at appropriate points in their teaching, and foster the development of an intuitive understanding of how to enhance input for ELLs (Andrews, 2007). Via biographical approaches, the teacher knowledge base, i.e., their degree of TLA, would ideally become a construct of the teacher's identity development, rather than the other way around (Kanno & Stuart, 2011). Encouraging all teachers to consider their knowledge base in terms of TLA could prove particularly relevant to K-12 teachers. Ideally, with this encouragement, teachers would not consider linguistically diverse students as "belonging" to the ESL specialist, but rather belonging in the mainstream classroom as (theoretically) they have been prepared to work effectively with ELLs.

The competition among language itself and other factors in L2 teacher education programs as well as content-based instructional settings warrants additional considerations for teachers in the K-12 context, such as drawing upon teachers' backgrounds, reinforcing and interconnecting teacher candidates' knowledge about language with their pedagogical content knowledge, and promoting connections with how the topical, linguistic, and cultural dimensions of L2 teacher expertise affect teacher decisions that facilitate language development as well as conceptual learning (Borg, 2005; Harper & De Jong, 2009). Unfortunately, over time notions of teacher expertise in the field of L2 education have become "boiled down" into concepts such as instructional strategies and toolkits for teaching so that the development of the specific expertise necessary for teaching language learners can initially be made more palatable to general K-12 educators, particularly in-service K-12 educators (Harper and De Jong, 2009).

Colleges and universities cannot take this approach, however, with its preservice teacher education for those who will work in K-12 contexts. If universities are going to emphasize the connections between all dimensions of TLA, those connections must be operationalized—L2 education and language diversity should be considered a specific curriculum issue, and teacher educators need to realize that, as supported by the results of the current study, one semester class in isolation is not enough to develop the degree of TLA that teachers need to be successful with their ELLs (Bigelow & Ranney, 2010; Leung, 2007).

Mainstream preservice teacher preparation should include numerous high-quality field experiences and practicum teaching opportunities that allow PSTs to identify and build on ELLs specific strengths, as well as to address their unique needs, which is particularly critical in academic content learning, literacy development, and formal assessment (Nieto, 2002). In addition to the university level, the policies and practices across multiple levels of schools—from the classroom to administration to legislation to teacher preparation--must acknowledge the situation in K-12 public schools and the teacher knowledge base necessary to take advantage of the multilingual resources inherent in linguistic diversity. This diversity "demands exploration and reformulation of new classroom practices and school structures rather than only minor adjustments to existing ways of doing and thinking (Harper & De Jong, 2009; p. 147). Indeed, it is possible that the undertaking of making language more explicit—and less "invisible"—to both teachers and students could require a major paradigm shift not just in the way teachers view themselves (i.e., as content *and* language teachers), but also in the way we conceptualize methods that best develop academic language in general.

CHAPTER 6

CONCLUSION

The study described in this dissertation sought to provide insight into the degree of teacher language awareness possessed by preservice K-12 educators of English language learners (ELLs) in a university-level teacher preparation program. It also endeavored to depict how degrees of Teacher Language Awareness (TLA) changed depending on the type of L2 coursework to which preservice teachers were exposed. Thus, TLA was investigated in terms of the Analyst Domain, which was operationalized via teachers' knowledge about language (KAL), and the Teacher Domain, which was operationalized via teachers' ability to identify the linguistic demands of content-area text that ELLs' may experience in a content-area classroom. Three principle research questions were investigated via a mixed-methods approach:

1) What is the baseline of TLA held by mainstream K-12 preservice teachers (PSTs) enrolled in two university-level courses that are designed to develop effective skills for working with ELLs?
2) How does the degree of TLA change between mainstream K-12 PSTs who have completed an L2 methods course with incidental instruction

about TLA, and those who have completed an L2 methods course with deliberate instruction about TLA?

3) What are the attitudes, perceptions, and experiences that underpin the degree of TLA held by mainstream K-12 PSTs both before and after incidental and deliberate approaches to TLA development?

Both quantitative and qualitative data indicate that, in response to the first research question, the degree of TLA held by PSTs was low. The low degree of TLA was derived from an analysis of the participants' written responses to a question that asked their opinion as to why a class on TLA would be required of them. It was found that none of them could specifically answer the question, and very few participants knew what the definition of TLA was, or how it connected to their teacher knowledge base. An additional factor identified during qualitative analyses of participants' written responses was that of attitude toward the notion of language as a system and grammar knowledge. Participants' responses exhibited general themes of frustration about their level of grammar knowledge, and negative feelings about the role of grammar and how much they felt they should know. Quantitative test scores on both the Analyst and Teacher Domain tasks also indicate a low degree of TLA for this group or PSTs. As a whole group, they were able to identify an average of only 2 out of 20 grammar constructions for the Analyst Domain task. In addition and as a whole group, they were only able to identify an average of two out of eight possible language demands inherent in a content-area text for the Teacher Domain. Their low degree of TLA may be largely due to the fact that they were primarily monolingual native speakers of English who possessed implicit knowledge about language and were proficient users of the language but had not

undergone extensive coursework or second/foreign language study that would help them become more explicitly aware of language as a system.

It was hypothesized that the preservice teachers enrolled in a course that sought to explicitly develop knowledge about language and TLA (i.e., the deliberate group) would exhibit a higher degree of TLA development in the Analyst Domain than preservice teachers enrolled in a course with an incidental approach to knowledge about language (i.e., the incidental group). This was borne out, as the mean scores of participants in the deliberate group improved significantly over the course of the semester on the Analyst Domain task. This is most likely due to the explicit nature of the course on TLA and its emphasis on language structures, grammar, and knowledge about language. This finding is important because teachers' knowledge about language, in particular, grammar, is relevant to even general educators who must be able to not only draw students' attention to academic language and grammatical forms used in content-area disciplines, but also design activities to help students achieve goals in those areas.

With regard to the aforementioned activity design, the first step in setting objectives and designing activities is recognizing the academic language demands inherent in a lesson. It was hypothesized that the incidental group would fare better on the Teacher Domain task, as the course they were enrolled in was designed to develop PSTs' skills in setting course objectives and designing activities. The course in which the incidental group was enrolled only incidentally developed KAL. However, neither group demonstrated significant improvement on the Teacher Domain task. This may be explained again by the fact that the participants in both groups were lacking the language awareness needed to recognize the language demands inherent in the materials with

which they were working. This trend persisted despite the fact that the content covered in the incidental group course included how to integrate content and language via building background, selecting appropriate strategies, facilitating interaction, and using formative assessment tools. This finding supports the notion that all domains of TLA, not just the Analyst Domain and KAL, would likely benefit from deliberate instruction when possible and appropriate.

Focus-group interviews also provided insight into participants' TLA upon completion of the two different types of coursework. First, these interviews revealed that participants' were able to provide more specific definitions of TLA than before. Participants from the deliberate group tended to use more language-specific terms than participants from the incidental group when defining TLA, which could also indicate a positive effect from the deliberate TLA coursework intervention. Participants in both groups demonstrated a more positive attitude toward TLA than they did before their focused L2 coursework, although the participants from the incidental group noted that their knowledge about grammar had not improved, but that other aspects of TLA, such as their own grammar use in practice, had improved.

Understanding second language (L2) acquisition was another area about which participants expressed positive attitudes. Several commented on how L2 theory was a main focus of their class and used to underpin the methods that they were taught. However, one participant commented that she still felt that personal experience was a better way to learn about L2 learning over classroom-based theory, a view consistent with many of the research findings that cite the important roles that personal experience and background play in the formation of teacher cognition.

The interview process also revealed how teachers had developed cognition in the Teacher Domain. One common theme among participants from both the deliberate and incidental groups was an increased level of empathy for ELLs. Participants from the incidental group commented on how the combination of factual information about ELLs combined with modeled strategies helped them understand more about what ELLs brought to the school setting and what they needed to succeed. Participants from the deliberate group commented on how the linguistic problems posed by the professor relative to the structure of language helped them think more like ELLs and helped them try to imagine what they might be experiencing. Participants also cited both classes as being responsible for their awareness of the fact that ELLs had varying levels of proficiency in English, something that most participants had not considered prior to their coursework. Finally, participants in both groups claimed they had improved in terms of their pedagogical content knowledge and working with ELLs. However, participants from the incidental group were more emphatic about this improvement, while participants from the deliberate group said that, while the course did help them problem-solve relative to language, it did not necessarily help them improve in terms of pedagogical practices. Research on the gap between teachers' KAL and their ability to operationalize it in the classroom supports this finding as well, as teachers may have difficulty envisioning how their explicit KAL (declarative knowledge) transfers in the classroom setting for pedagogical purposes (procedural knowledge). It is logical that participants from the class designed specifically around pedagogical methods rather than explicit TLA would self-report on developing this domain to a higher degree.

The present study is not without its limitations, however. Perhaps the most notable limitation is the limited view of the Analyst Domain and knowledge about language that the study presents. In the present study, KAL is operationalized primarily as written grammar knowledge, when in reality it includes so much more. First, grammar itself can be grammar in context, grammar and corpus/lexis, discourse grammar, spoken grammar, and written grammar (Andrews, 2007). Second, KAL is more than all of the aforementioned types of grammar—it also includes orthography, the language modalities, pragmatic use, discourse analysis, and sociolinguistic variation (Bartels, 2009). Third, KAL is not a finite set of knowledge, but it is dynamic depending on the learners being taught and the context in which the teacher finds him or herself (Bigelow & Ranney, 2005; Burns & Knox, 2005). Because the present study took place among preservice teachers who were not yet working in an authentic classroom setting with real ELLs, the type of KAL that was measured lacks the nuanced perspective that teachers can develop when they are actually working as in-service educators.

Another limitation of the study is that, in terms of the Teacher Domain of TLA, it only measured participants' ability to identify language demands of content-area text. It was not within the scope of the study to examine how the preservice teachers would then use the language demands recognized to craft performance objectives or design strategies for language learning in the content area. The efficacy of performance objectives and implementation of learning strategies are better examples of what could determine positive student outcomes; as such, this study does not connect TLA to student outcomes, but instead only supposes that increased TLA would aid teachers in developing efficacy with ELLs.

With respect to the qualitative research component, it would add richness to the existing evidence on TLA to ask participants during interviews to orally explain what they were thinking as they attempted to identify language demands. This "think aloud" approach would be one way to further understanding of teacher cognition about the text/language interface, rather than focusing more on the coursework, as the interviews in the present study did.

Examining those next steps in the Teacher Domain, such as objective creation and activity design, would be an excellent point of continuation for future research. Longitudinal approaches to TLA that follow preservice teachers as they become novice in-service teachers could also prove enlightening, as TLA is likely to develop over time and in various contexts. It would be very interesting to see how the TLA of preservice versus in-service teachers varies. Another direction this research could take would be to compare the TLA of monolingual and multilingual teachers at varying points in their career to determine the degree of influence that language-learning experience might have. Because much of the research on TLA has been conducted either with L2 specialists or in EFL contexts, plenty of aspects of the TLA of general educators remain ripe for examination.

In summary, this study illuminates a current interdisciplinary issue facing both applied linguists and educators today. Most mainstream K-12 educators will work with ELLs at some point in their career, and ideally will be educated in how to do so. However, despite this education, it is possible that their degree of TLA will still remain low, which could in turn affect the efficacy of their pedagogical practices. The investigation of TLA among this educator demographic could prove a critical piece to

solving the puzzle of how best to develop academic language among linguistically diverse populations in K-12 contexts. If teachers should be able to explicitly teach about language and focus on it during their K-12 lessons, it appears that teacher educators must also teach about language and focus on it during their university-level lessons. The researcher hopes that the present study will provide teacher educators additional information about how their preservice teachers conceive of the "invisible medium" that is language, and in turn encourage them to make language more explicit, more visible, more maneuverable, and more an integral part of the way that they conceptualize learning itself.

APPENDIX A

QUESTIONNAIRE/NEEDS ANALYSIS FOR

PRESERVICE TEACHERS OF ELLS

Student Information

Name:

Student Number:

I am a:

- Freshman
- Sophomore
- Junior
- Senior
- Graduate student
- Nonmatriculated student

If you are an undergraduate, what is your:

- Major:
- Minor:

I plan to teach:

- Early Childhood
- Elementary
- Secondary
- Special Education (K-12)
- English as a foreign language (outside of the USA)

If secondary, please select the content area(s) in which you plan to specialize:

- Language Arts
- Math
- Science
- Social Studies
- Fine/Performing Arts
- Physical Education
- Technology/Vocational
- World Language

Course of Study Information

I am in the process of obtaining a(n):

- ESL Endorsement/ESL Minor
- TESOL Certificate
- Neither

I am currently enrolled in the following courses:

- LING 1200 Introduction to Linguistics
- LING 3200/6000 Linguistics for Educators
- LING 5233 Pedagogical Structures of English
- LING 5810 L2 Methodology
- LING 5811 Educating English Language Learners
- LING 5812 Content-Based Instruction
- EDU 5200 Teacher Language Awareness
- ECS 3150 Intro to Multicultural Education
- ECS 5634/6634 Bilingual Bicultural Education
- ECS 5645 Assessment of Diverse Populations
- ECS 5709 School-Family Partnerships
- FCS 3180 Home, School & Community Relations

I have completed the following courses:

- LING 1200 Introduction to Linguistics
- LING 3200/6000 Linguistics for Educators
- LING 5233 Pedagogical Structures of English
- LING 5810 L2 Methodology

- LING 5811 Educating English Language Learners
- LING 5812 Content-Based Instruction
- EDU 5200 Teacher Language Awareness
- ECS 3150 Intro to Multicultural Education
- ECS 5634/6634 Bilingual Bicultural Education
- ECS 5645 Assessment of Diverse Populations
- ECS 5709 School-Family Partnerships
- FCS 3180 Home, School & Community Relations

Personal Experience

- Have you taught before? If so, for which age group? In which content area? In what setting?
- Have you studied a language other than English? If so, for how many years?
- How would you rate your proficiency in this language?
- If you studied this language in college, what was the highest-level course you took in this language?
- Are any languages other than English spoken fluently in your immediate home surroundings? Which one(s)?
- Have you spent an extended amount of time outside of the USA in a country where the primary language was not English? If so, how long were you there?

APPENDIX B

ANALYST DOMAIN TASK

Knowledge about Language Survey

(Courtesy of Bigelow & Ranney, 2005)

Directions: Read through the passage below from a children's news magazine. Then find the grammatical structures listed below within the text. Follow the directions above the terms to identify the structures.

Kidd's Big Adventure:

Explorers say they've found the wreck of Captain Kidd's pirate ship

(by Martha Pickerill in Time for Kids, March 3, 2000)

1. Near the coast of Madagascar's tiny island of Sainte-Marie, explorer Barry Clifford floated above a pile of smooth rocks. He blinked, swam closer and realized his eyes weren't fooling him. There were pieces of pottery, white and crisp blue, among the rocks. He rose to the surface and shouted, "I think I've got it!"
2. "It" was a 302-year-old shipwreck. Last week Clifford and his team announced they had found what they believe is the wreck of the *Adventure*, the ship of the infamous pirate

3. William Kidd. The Chinese pottery they found was made in the late 17th century, when Kidd was sailing. They also found a metal oarlock, which keeps oars in place on a galley ship.
4. The *Adventure's* last voyage, in 1698, began as a mission of justice. King William of England gave Captain Kidd the ship and a crew, and orders to capture pirates who were menacing ships in the Indian Ocean. The *Adventure* was a galley-a ship powered by both sails and oars for rowing. It was poorly built. Even worse, the first sailors Kidd picked to help him were suddenly recruited by England's navy, so he had to hire a bunch of losers for his crew.
5. The men did not rescue any ships in trouble. Instead, they ended up becoming pirates themselves, capturing two ships and their cargo. Some blame the crazy crew for what happened. Others say it was Kidd's fault. After the awful journey, he was found guilty of piracy and murder and put to death.
6. A few experts say the discovery simply can't be the *Adventure*. Author Richard Zacks, who is writing a new book about Kidd, is among the doubting. His research shows that the Adventure's oarlocks would have been wooden, not iron, and that Kidd burned the ship on the beach. Zacks can't believe anything was left of it, but he's rooting for Clifford's team anyway.
7. "I hope they found it," says Zacks. "But what's really amazing about Kidd is his life story. He married the richest woman in New York. The King of England sent him on an important mission. After all that, he has gone down as the most notorious pirate in history."

Name _____ Date _____

Grammatical structures:

For each of the terms in the list below, there is at least one example in the text. Find the example and write the paragraph number and the phrase including the structure next to each item below. If you don't know what the label means, write DK for "Don't know".

1. direct quote
2. indirect quote
3. restrictive relative clause
4. non-restrictive relative clause
5. passive verb form
6. phrasal modal
7. phrasal verb
8. prepositional phrase
9. present progressive verb tense
10. present perfect verb tense
11. past progressive tense
12. past perfect tense
13. *be* used as a copula
14. *be* used as an auxiliary
15. modal auxiliary
16. referential pronoun
17. non-referential pronoun

18. adverbial clause

19. adverbial phrase

20. superlative form

APPENDIX C

TEACHER DOMAIN TASK

Directions: Please read the text from a unit on the U.S. Civil Rights Movement. Then, imagine you are about to teach a lesson based on this chapter. Your students are eighth graders (about 50% are native English speakers and 50% are English language learners--ELLs). The proficiency level of your ELLs ranges, but most of them are at an intermediate level in speaking and listening and a high beginner/pre-intermediate level in reading/writing. These ELLs have been to the US between two-five years. Please list any language areas from this reading that may be difficult for your ELLs.

Standing Up for Freedom

Most historians date the beginning of the modern civil rights movement in the United States to December 1, 1955. That was the day when an unknown seamstress in Montgomery, Alabama refused to give up her bus seat to a white passenger. This brave woman, Rosa Parks, was arrested and fined for violating a law. Her defiance began a movement that ended legal segregation in America. It made her an inspiration to freedom-loving people everywhere.

Rosa Parks was born Rosa Louise McCauley in Tuskegee, Alabama to James McCauley, a carpenter, and Leona McCauley, a teacher. At the age of two she moved to her grandparents' farm in Pine Level, Alabama with her mother and younger brother, Sylvester. At the age of 11 she enrolled in the Montgomery Industrial School for Girls, a private school founded by a group of women from the northern United States.

Opportunities were few. "Back then," Mrs. Parks recalled in an interview, "we didn't have any civil rights. It was just a matter of survival, of existing from one day to the next. I remember going to sleep as a girl hearing the Klan ride at night and hearing a lynching and being afraid the house would burn down." In the same interview, she said her lifelong relationship with fear was the reason for her fearlessness in deciding to appeal her conviction during the bus boycott. "I didn't have any special fear," she said. "It was more of a relief to know that I wasn't alone."

After attending Alabama State Teachers College, the young Rosa settled in Montgomery, with her husband, Raymond Parks. The couple joined the local chapter of the NAACP. They worked quietly for many years to improve life for African-Americans in the segregated south.

The bus incident led to the formation of the Montgomery Improvement Association, led by Dr. Martin Luther King, Jr. The association called for a boycott of the city-owned bus company. The boycott lasted 382 days. It brought Mrs. Parks, Dr. King, and their cause to the attention of the world. A Supreme Court Decision struck down the Montgomery ordinance under which Mrs. Parks had been fined, and outlawed racial segregation on public transportation.

In 1957, Mrs. Parks and her husband moved to Detroit, Michigan where Mrs. Parks served on the staff of U.S. Representative John Conyers. The Southern Christian Leadership Council established an annual Rosa Parks Freedom Award in her honor. After the death of her husband in 1977, Mrs. Parks founded the Rosa and Raymond Parks Institute for Self-Development.

Mrs. Parks spent her last years living quietly in Detroit, where she died in 2005 at the age of 92. After her death, her casket was placed in the rotunda of the United States Capitol for two days, so the nation could pay its respects to the woman whose courage had changed the lives of so many. She was the first woman in American history to lie in state at the Capitol, an honor usually reserved for Presidents of the United States.

Adapted from http://www.achievement.org/autodoc/page/par0bio-1

APPENDIX D

RATER RECORD SHEET FOR TEACHER DOMAIN TASK

Content-Based Task

Rater Data Record

Rater A B C D E

Thank you for agreeing to participate as a Rater in the research study, "Exploring an Invisible Medium: Teacher Language Awareness among K-12 Educators of English Language Learners." Your time and expertise are essential components to this study, and I am excited to be working with you.

Study Background for Raters

Preservice educators in the process of obtaining a K-12 English as a Second Language (ESL) endorsement were asked to perform a pre- and posttest task designed to elicit data relative to their degree of Teacher Language Awareness (TLA). The task instructions directed them to first read a content-area passage about the Civil Rights movement in the U.S. They were then directed to identify any language demands present

in the text that would prove troublesome for ELLs. Secondly, they were asked to suggest a follow-up activity that they would implement in the classroom to help their ELLs with the language demand they had listed in the first question.

Your Task as a Rater

First, read their answer and determine which language demands the PST noticed. The organizer provided will help you categorize each response. Record your response by simply writing the participant's number next to the language demand. Please mark any ambiguous terms or terms that repeat categories with an asterisk (*).

Question 1: Language Demands	**Participant #**
Vocabulary	
• Content-Compatible: *terms that are academic in nature, but may appear in other content areas or be used for other purposes* • *Examples: seamstress, violate, grandparents, maiden name*	
• Content-Obligatory: *terms that **must** be understood in order to grasp the full meaning of the lesson or text* • *Examples: NAACP, Rosa Parks,*	

• Content-Obligatory: *terms that **must** be understood in order to grasp the full meaning of the lesson or text* • *Examples: NAACP, Rosa Parks, Martin Luther King, Civil Rights, segregation, boycott*	
• Other	
Reading Strategies	
• *Examples: attention to text structure, such as headings, captions, pictures, etc.* • *Skimming/scanning for information* • *Bold/underline key terms or concepts*	
Grammar	
• *Subject-verb agreement* • *Tense* • *Articles* • *Syntax (complex v. simple)—clauses, etc.*	

Functional Language	
• *Terms that are not content-specific but perform a certain language function, such as sharing information, organizing information, being humorous, or communicating personal belief* • *Examples: transitions such as first, second, third, last; phrasal language such as "I believe, I think…," etc.*	
Background knowledge	
• *Topic awareness, context, prior learning*	

Word Study	
• *Prefixes, suffixes, root words, pronunciation, morphology/phonology*	
Difficulty of text	
• *General comments about the reading level of the text relative to the level of the ELLs in the class*	
[Writing]	

APPENDIX E

INSTRUCTOR OBSERVATION CHECKLIST

Constructs & Criteria	**Present**	**Not Present**
Lesson Preparation		
1. Writes and posts performance objectives clearly for students.		
2. Chooses content concepts relevant to the syllabus.		
3. Implements supplementary materials to use (graphs, models, visuals).		
4. Plans meaningful activities that integrate lesson concepts (e.g., surveys, letter writing, simulations, constructing models) with language practice opportunities for reading, writing, listening, and/or speaking.		
Building Background		
5. Links concepts to students' backgrounds and experiences.		
Comprehensible Input		
6. Explains academic tasks clearly.		
7. Uses a variety of techniques to make content concepts clear (e.g., modeling, visuals, hands-on activities, demonstrations, gestures, body language).		

Strategies		
8. Provides ample opportunities for students to use strategies, (e.g., problem solving, predicting, organizing, summarizing, categorizing, evaluating, self-monitoring).		
9. Uses a variety of question types including those that promote higher-order thinking skills throughout the lesson (literal, analytical, and interpretive questions).		
Interaction		
10. Provides frequent opportunities for interactions and discussion between teacher/student and among students, and encourage elaborated responses.		
11. Provides sufficient wait time for student responses consistently.		
Practice/Application		
12. Discusses activities in the context of their application to real-world teaching.		
Lesson Delivery		
13. Supports performance objectives clearly.		
14. Paces the lesson appropriately to the students' ability level.		

Review/Assessment		
15. Gives a comprehensive review of key content concepts.		
16. Provides feedback to students regularly on their output (e.g., language, content, work).		
17. Conducts assessments of student comprehension and learning throughout lesson on all lesson objectives (e.g., spot checking, group response).		

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